ePPOC Patient Information Centre

User Manual

User Interface

Version 1.5

epiCentre

ePPOC patient information centre

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UNIVERSITY OF WOLLONGONG

Contents

1 Introduction

Welcome to epiCentre! epiCentre is the software for entering and managing data relating to ePPOC (the electronic Persistent Pain Outcomes Collaboration).

ePPOC is a program which purpose is to provide outcomes based benchmark reporting for pain management clinics throughout Australasia. It involves a development of a standardised dataset, data collection protocol and regular submissions of de-identified data for analysis and reporting.

As the software at the heart of ePPOC, epiCentre provides an easy-to-use way of collecting data which conforms to the ePPOC dataset. In the ePPOC dataset, there are really two types of data collection: clinician provided data and patient reported outcomes. In order to create a flexible solution epiCentre is integrated with an online data collection tool called 'REDCap'.

REDCap is written and maintained by Vanderbilt University in Tennessee, USA and is an online survey tool. REDCap is hosted on a web server in a secure data centre at University of Wollongong. epiCentre is able to create instances of these questionnaires on the REDCap server, and to automatically synchronise the data between REDCap and your hospitals epiCentre database. This integration has been implemented in such a way that REDCap never stores, or even sees, any identifiable data about the patient.

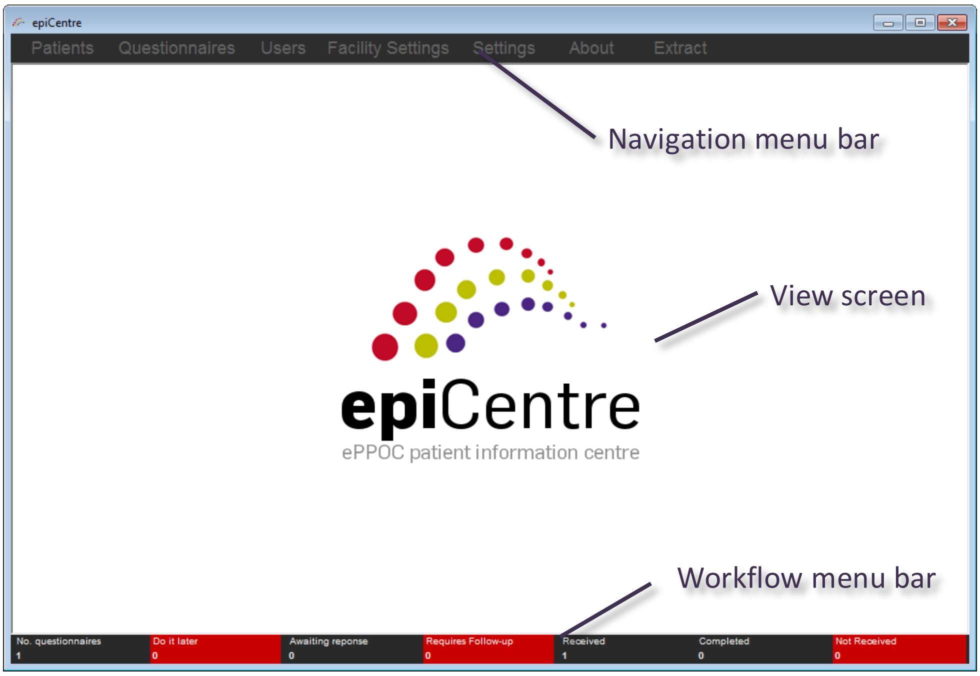
The patient questionnaires are created in REDCap. epiCentre and REDCap support the completion of these questionnaires by either the patients themselves or by clinical staff, depending on the preference of each facility. This means that in practice, patient reported outcomes in ePPOC can be collected via a variety of methods.

The purpose of this document is to equip you, the user, with the knowledge to use epiCentre for collecting and reviewing ePPOC data.

This section of the documentation is focused on explaining the pages and procedures for using epiCentre. It assumes you understand the concepts in the previous sections 'ePPOC Data Set and Collection Protocol' and 'Creating and Managing Questionnaires'.

2 Using epiCentre

epiCentre’s user interface can be divided into 3 parts.



At the top, a *navigation menu* bar will help the user navigate between the different views of epiCentre.

The navigation menu bar will depend on the role of the user. Only Administrators and Managers will be able to access the *Users page*, as well as the *Facility page*. All users will be able to access the *Patients page*, the *Questionnaires page* and the *Settings page*.

You can navigate quickly using keyboard shortcuts.

View screen page	Keyboard shortcut	Purpose
Patients page	Alt + P	Manage patients of the current facility.
Questionnaires page	Alt + Q	Manage questionnaires.
Users page	Alt + U	Manage users in the system or the facility.
Facility Settings page	Alt + F	Manage facilities in the system.
Settings page	Alt + S	Manage the user’s settings.
Proxy Settings Page	Alt + X	Allows to change the Windows password.
Db Debugging tool	Alt + Y	Allows to change settings in database.

The workflow menu bar displayed at the bottom of the screen, provides information related to the current state of the workflow such as:

- The total number of questionnaires in the system.
- The number of questionnaires which are to be sent later (*Dot it later).*
- The number of questionnaires which have been sent and not answered yet (*Awaiting Response).*
- The number of questionnaires which have been sent, and require follow-up (*Requires Follow-up).*
- The number of questionnaires for which an answer has been received but require a clinician to complete them (*Received).*
- The number of questionnaires for which an answer has been received and a clinician has completed (*Completed)*.
- The number of questionnaire that have expired (*Not Received*)

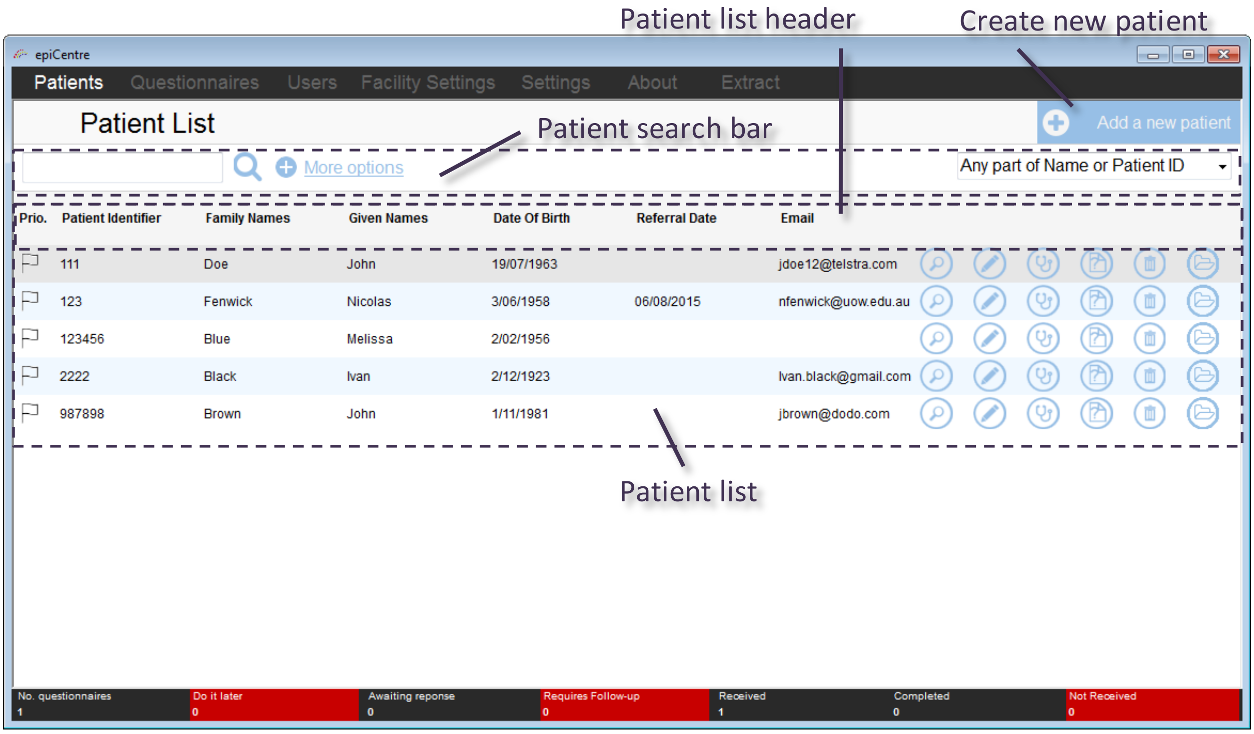
In the middle, the view screen is the main frame where the content of the pages is displayed. The pages displayed will help you manage your own workflow or your facility and user settings and will be described in the next following sections.

3 Patients

3.1 Concepts

epiCentre's core functionality is organised around the patients. Creating and searching for a patient has been made as easy as possible in epiCentre in order to provide fast and intuitive access to relevant data. epiCentre enables you to create, edit or delete patients. epiCentre also allows you to access details on the medical path of your patient and details on the questionnaire that have been filled.

3.2 Patient page



Each row in the patient list represents a patient. Icons on the right hand side of the table allow the user to:

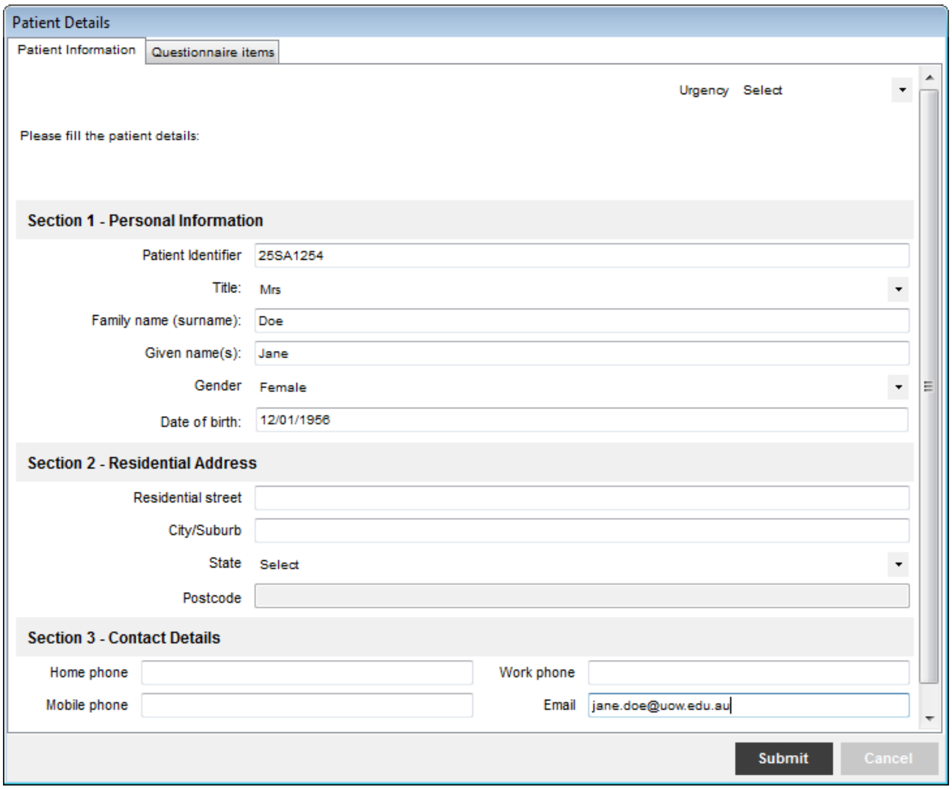
- view a patient
- edit a patient
- access medical history and detail
- access the questionnaire related to this patient
- delete the patient
- archive the patient

Double clicking on the row of the table will take you to the medical history and detail for that patient.

Users can create a new patient by clicking on the *Add a new patient* button on the top right corner of the view screen. Users, at last can search and sort patients using the Patient list Header and the patient search bar.

3.3 Creating a patient

Clicking on the button on the top right hand corner of the view screen will open the patient details form which asks the user to enter the new patient's information.



The patient details view is divided into two tabs:

Patient Information

The patient details form includes the following mandatory information:

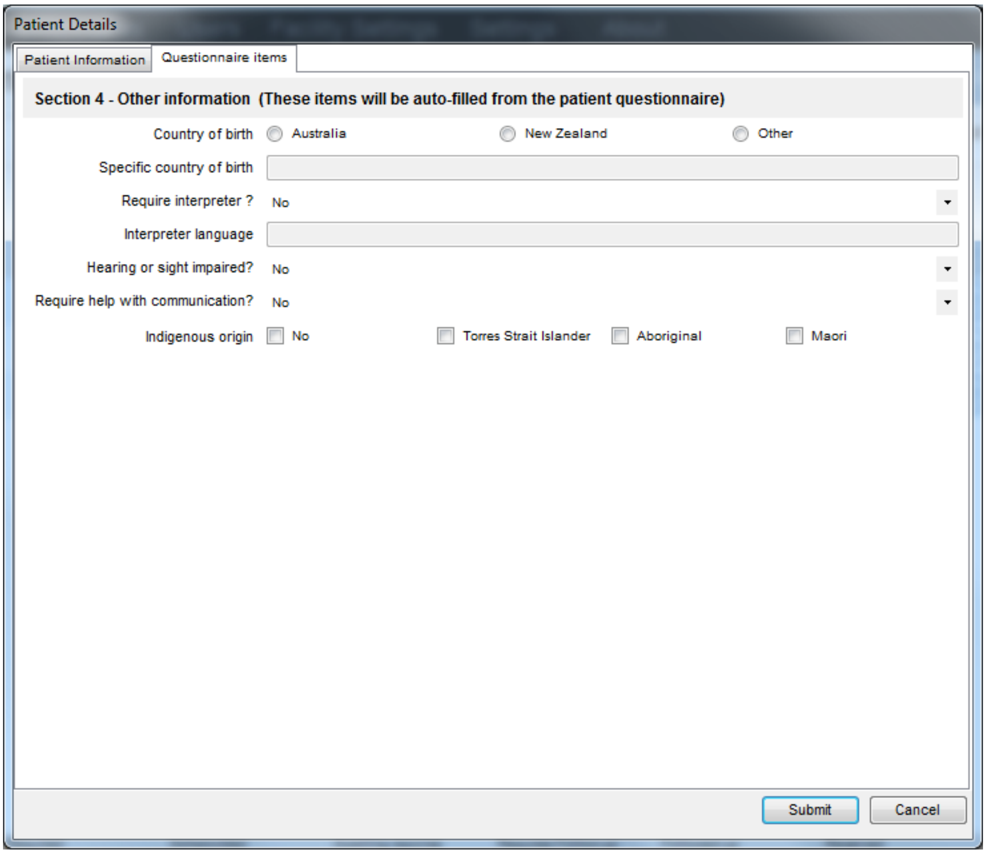
- Medical Record Number
- family name
- given name
- gender
- date of birth

It also includes contact details which are not mandatory but maybe useful to have in one place:

- street
- city/ suburb
- state
- postcode
- home phone number
- work phone number
- mobile phone number
- email
- urgency

Questionnaire items

Patient details also encompass data that will be populated automatically when the patient's response to an initial questionnaire is received.



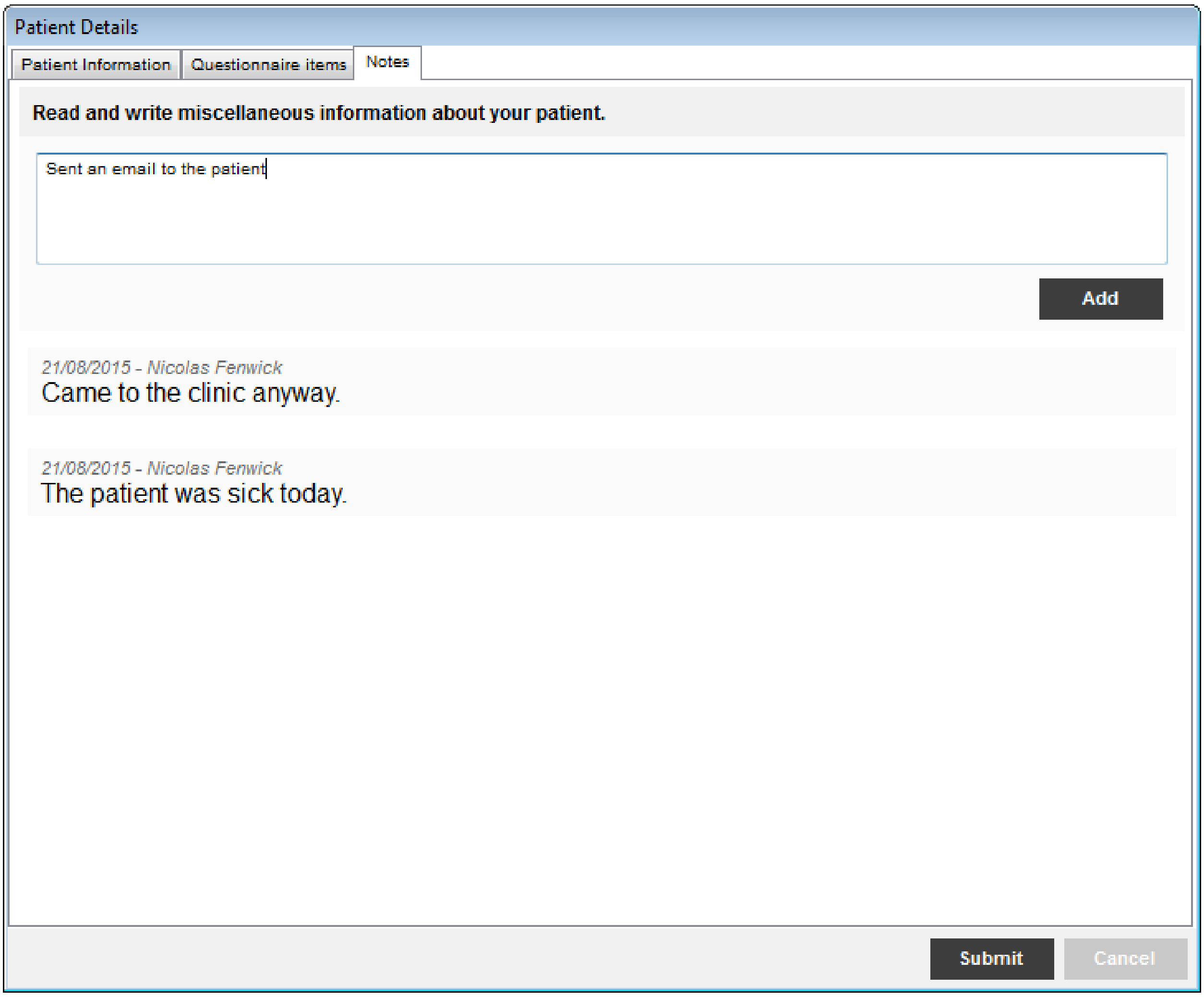
Questionnaire items encompass:

- country of birth
- need for an interpreter
- hearing or sight impairment

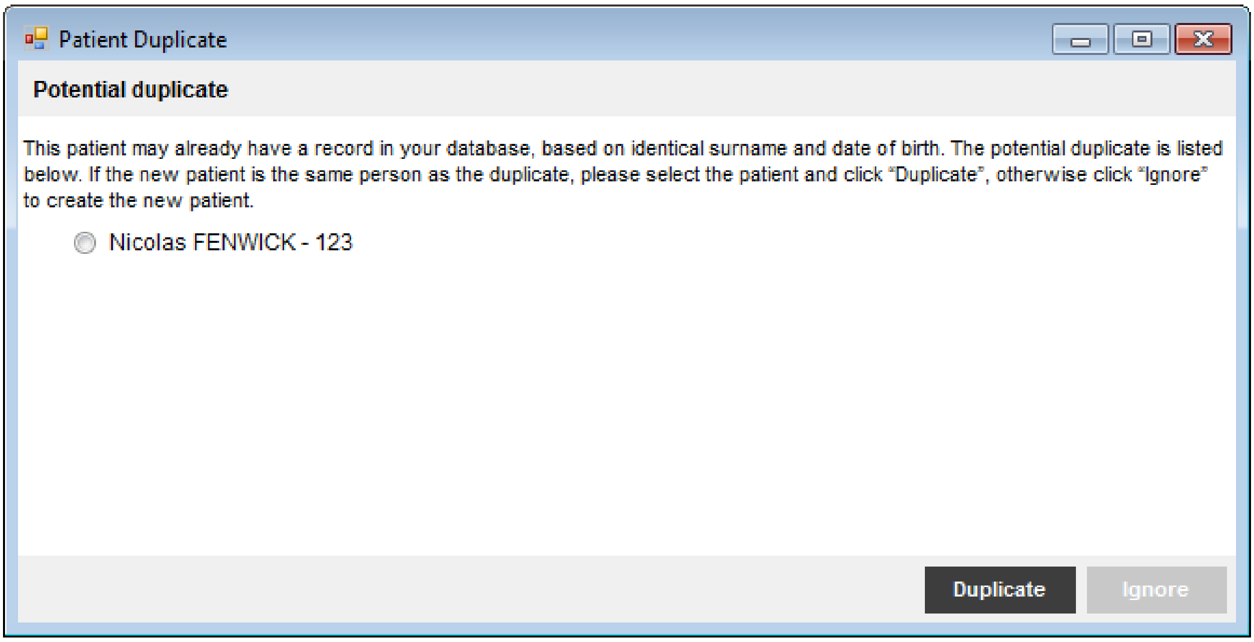
- need for help with communication
- indigenous origin of the patient

Patient Notes

At last on the Patient Details page the user will be able to add notes for that patient.



Clicking on *Cancel* or pressing the escape key will close the patient details form without saving the data. Clicking on *Submit* or pressing the enter key will first check data validity and for potential duplicate.



If your new patient has the same last name and date of birth as a patient that already exists in the database, you will be asked to validate the creation of the patient. Clicking on “Ignore” will create the patient and add it to the list. Selecting the patient and clicking on “Duplicate” will not create a new patient but filter the patient list to only show the selected patient.

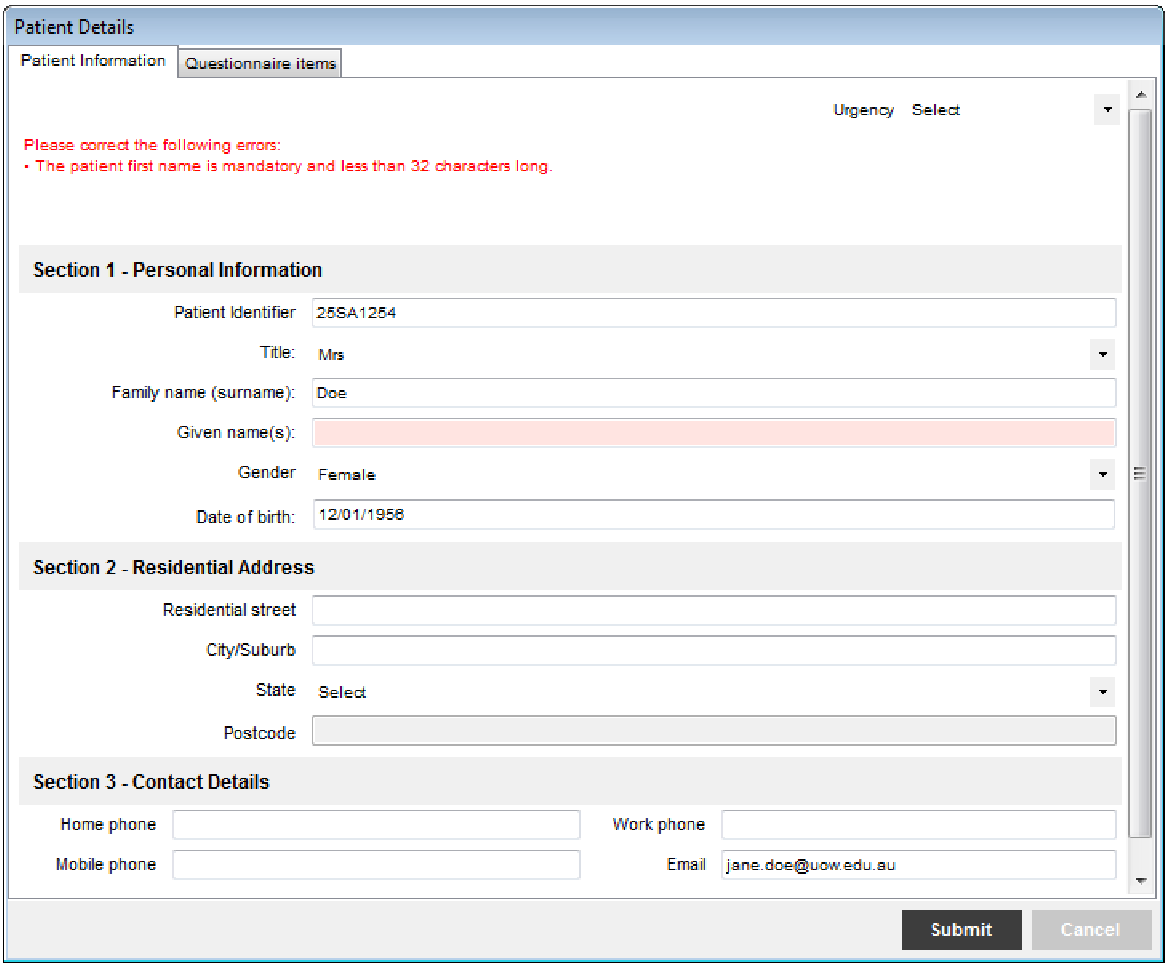
In both cases, the patient will be displayed on the Patient List.

Data validation

In epiCentre, invalid data is reported in 3 ways:

- a clear error message is displayed on the form, in red at the top of the form
- the field itself is displayed in red

- a tooltip will appear when the mouse is held over the field giving more details on the reason the data is invalid



3.4 Editing a patient

Clicking on the pencil icon will allow the user to edit a patient. The Patient Details view will be opened prepopulated with the patient's data. The user will then be able to edit any field. When clicking on Submit or pressing enter, the validity of the data will first be checked before being updated. Pressing Cancel or the escape key will close the form without updating the data.

3.5 Deleting a patient

Clicking on the trash can will delete a patient. Deleted patient will be hidden from the list of patient and won't be extracted. Deleted patients appear in light pink and can always be recovered by clicking on the trash can again.

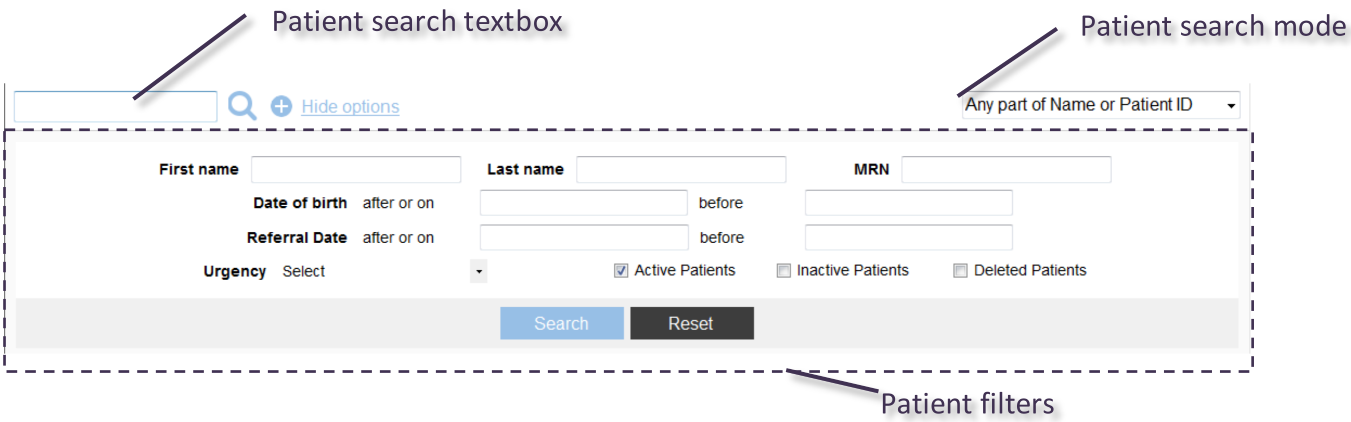
3.6 Archiving a patient

Archiving a patient will hide it from the display without deleting it from the system. Archiving a patient will also remove his episodes, pathways, service events and questionnaires from the display without deleting them from the system enabling the user to restore the patient if necessary. Archived patients are included in the extracts.

3.7 Searching for a patient

Finding a patient is facilitated by the patient search bar which will filter the list of patients. The user can also sort the list based on the fields displayed in the Patient List header by clicking on the field by which they want to sort.

3.7.1 Filtering



1. Patient Search Box

Parameters taken into account in order to search for a patient in the patient search box include:

- first name
- last name
- medical record number
- or ePPOC Patient ID

The filtering will be performed based on the information entered in the patient search box. The filter can either be a partial match or a search on the ePPOC Patient ID depending on the patient search mode selected on the top right of the form.

The search will be processed when the user clicks on the magnifier icon or when pressing the enter key and the focus is on the patient search textbox.

2. Patient Filters

Clicking on “More Options” will open the patient filter box. The patient filter box allows you to search your patient based on:

- the first name
- the last name
- the medical record number
- a timeframe for their date of birth
- a timeframe for the referral date
- the urgency of the patient (Low, Moderate, High)
- whether the patient is active or not
- whether the patient has been deleted in the past

Clicking on search will filter the list of patients and only display the patients that match the criteria entered.

Deleted patients will be displayed in light pink.

Archived patients will be displayed in light grey.

3.7.2 Sorting

By default the patient list sorted by ascending family name. Clicking on the field names in the header of the patient list will change the sorting order.

Prio.	Patient Identifier	Family Names	Given Names	Date Of Birth	Referral Date	Email
	111	Doe	John	19/07/1963		jdoe12@telstr...
	123	Fenwick	Nicolas	3/06/1958	06/08/2015	nfenwick@uo...
	123456	Blue	Melissa	2/02/1956		
	2222	Black	Ivan	2/12/1923		Ivan.black@g...
	25SA1254	Doe	Jane	12/01/1956		jane.doe@uo...
	987898	Brown	John	1/11/1981		jbrown@dodo...

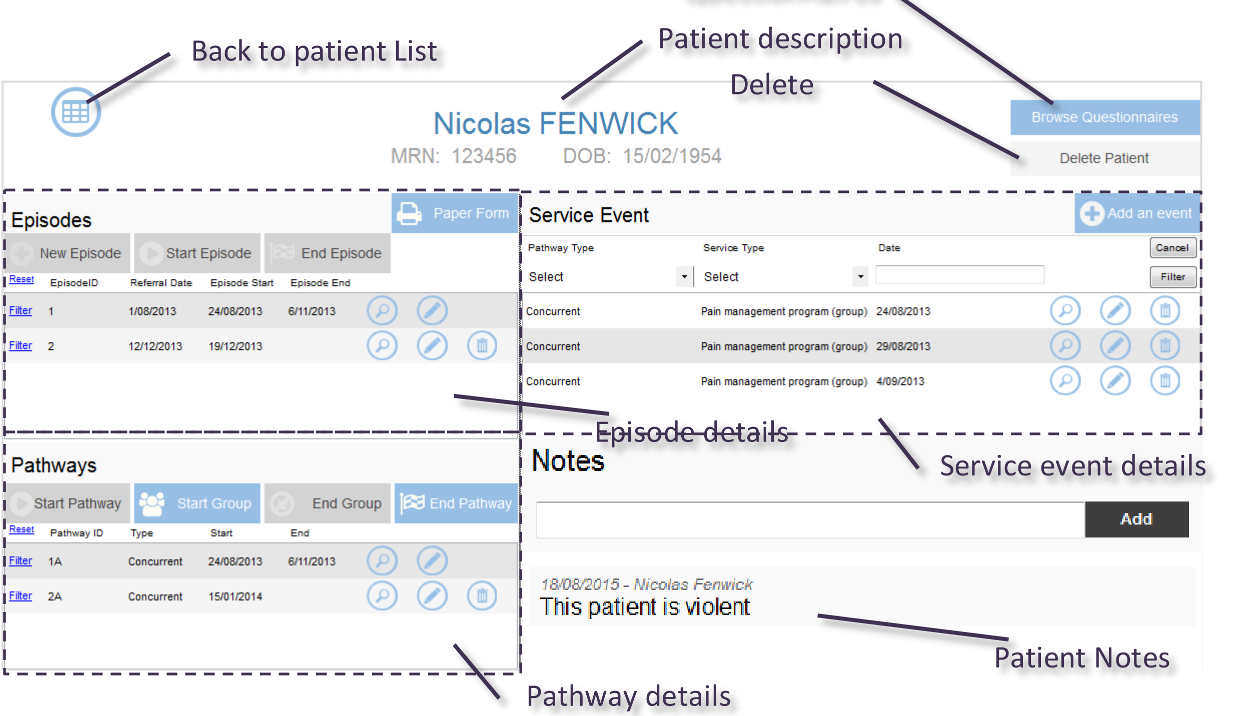
4 Patient medical details

4.1 Concepts

Clicking on the stethoscope icon or double clicking on the patient line will open the patient related medical details page.

The patient medical details page includes information about the different medical events provided to the patient. The user may create, update and delete Episodes, Pathways and Service Events through this interface.

4.2 Medical details page



4.3 Patient Description

At the top of the page the patient description allows the user to easily access the patient's name, MRN and date of birth, navigate back to the patient list or browse the patient related questionnaires or, when applicable, delete a patient.

4.4 Episodes

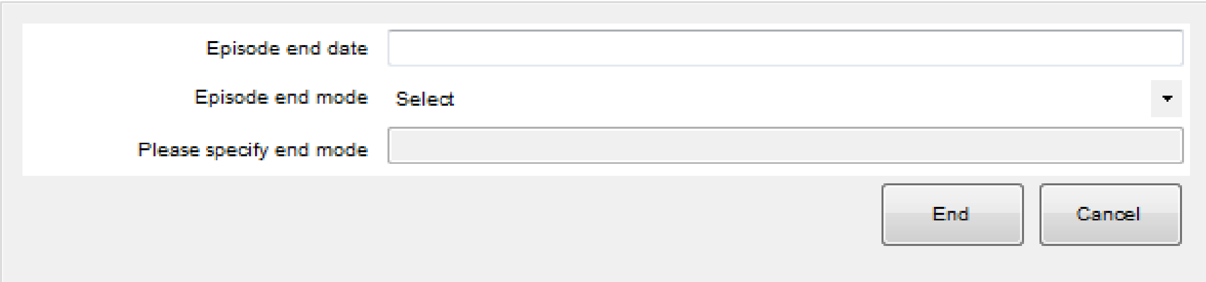
4.4.1 Workflow

The workflow for an episode can be divided into three parts:

- episode creation (at referral)
- episode start (first appointment or assessment whichever comes first)
- episode end

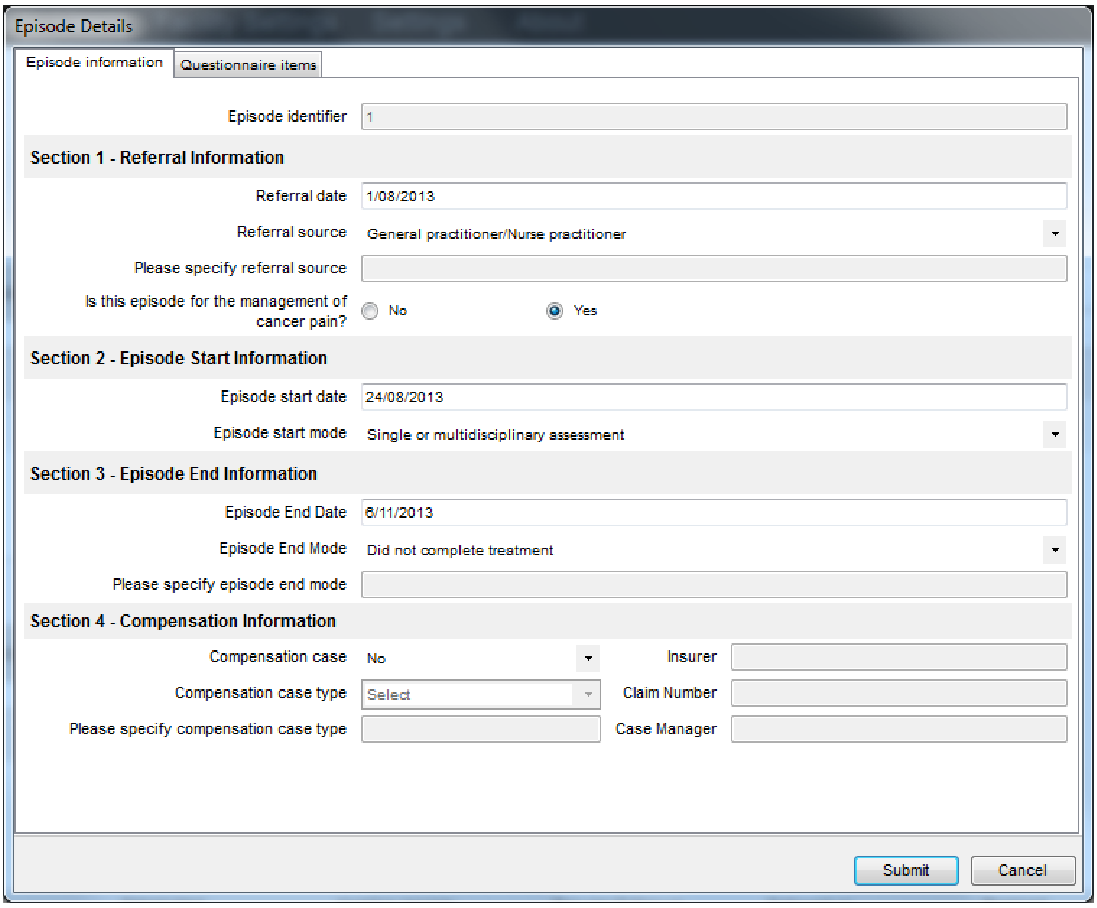
Three buttons in the episode action bar describe these steps of the workflow. In order to prevent invalid data entering, buttons are only enabled when the action they represent is enabled. If the action is disabled, the button will be greyed and a tooltip will be displayed when the mouse is held over it to give more information about why the action is prevented.

When enabled, clicking on a button will allow the user to enter the mandatory data.



4.4.2 Edit episode details

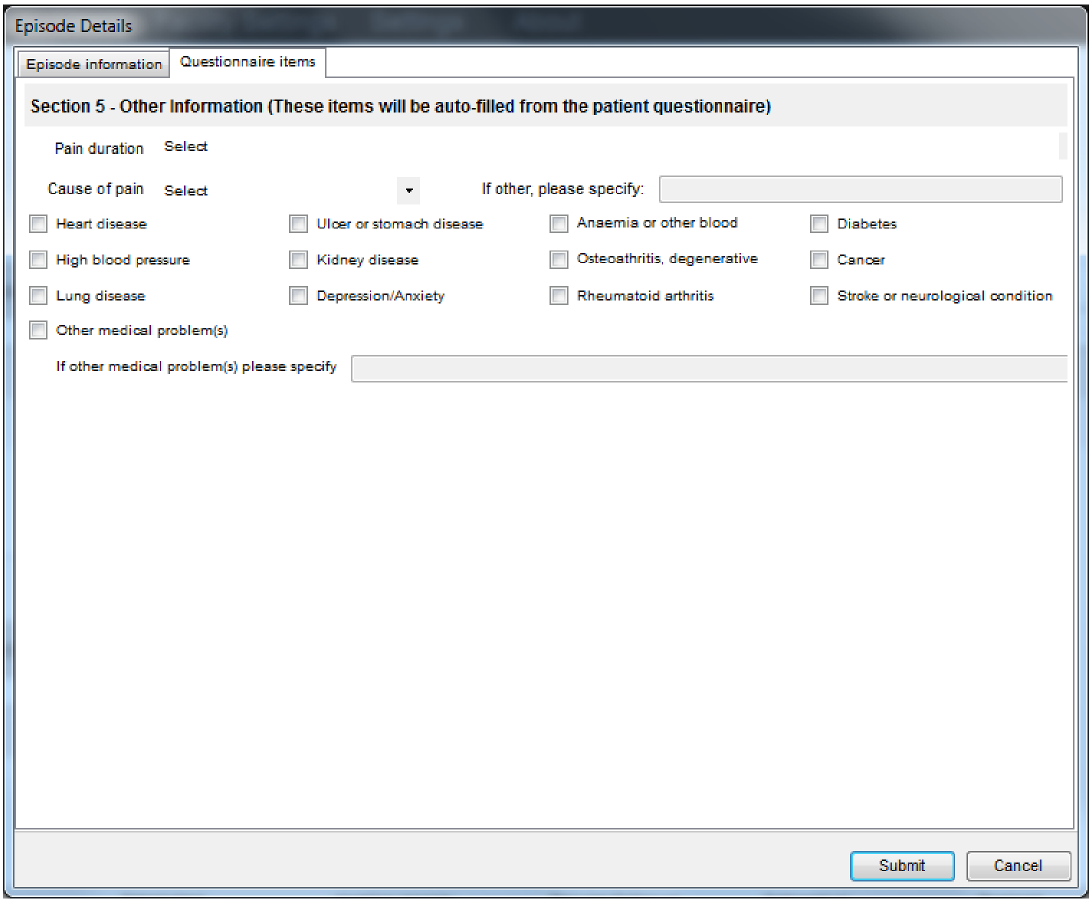
The user is able to edit episode data if necessary clicking on the pencil icon. This will open the episode details page:



This page encompasses data from the workflow as well as compensation information. Workflow information is only editable if the state of the episode allows. For instance, the episode end date can only be edited if the episode has already been ended via the action buttons.

The questionnaire items tab of the page will be automatically filled once the initial questionnaire is filled by the patient and contains information relating to:

- the pain duration of the patient for that episode
- the cause of the pain
- other comorbidities



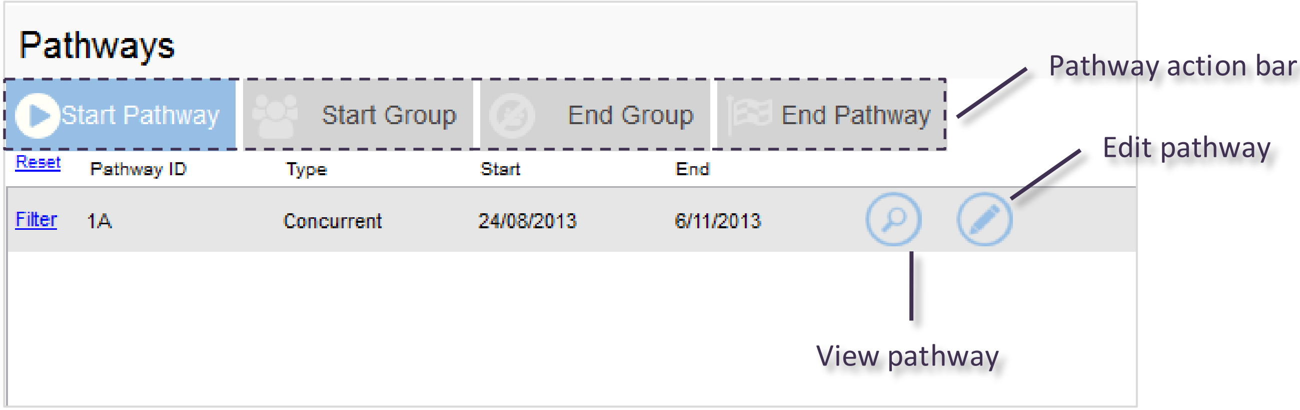
4.4.3 Deleting an episode

An episode can be deleted clicking on the trashcan. This action is only available if no questionnaire or pathway has been attached to this episode.

4.4.4 Filtering grids

The grids can be filtered using the filter button on the left of the episode list. Clicking on reset removes the filter. For instance if you are looking for all the pathways and services that happened during the episode 1, a click on the filter link for the episode 1 will update all the grids showing only data related to episode 1.

4.5 Pathways



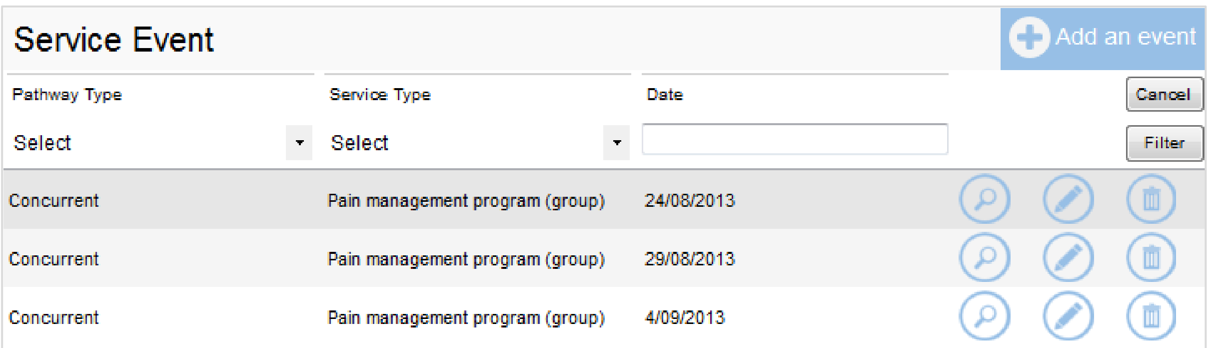
4.5.1 Workflow

The workflow for a pathway can be divided into:

- pathway start
- group program start (for concurrent pathways only)
- group program end (only after a group program has been started)
- pathway end

Clicking on an action button will allow the user to enter the mandatory data related to the action. Pathway details may be edited by clicking on the pencil icon. A pathway can be deleted only if no service event and no questionnaire have been attached. Clicking on filter on the left of the pathway list will allow the user to filter the service event list.

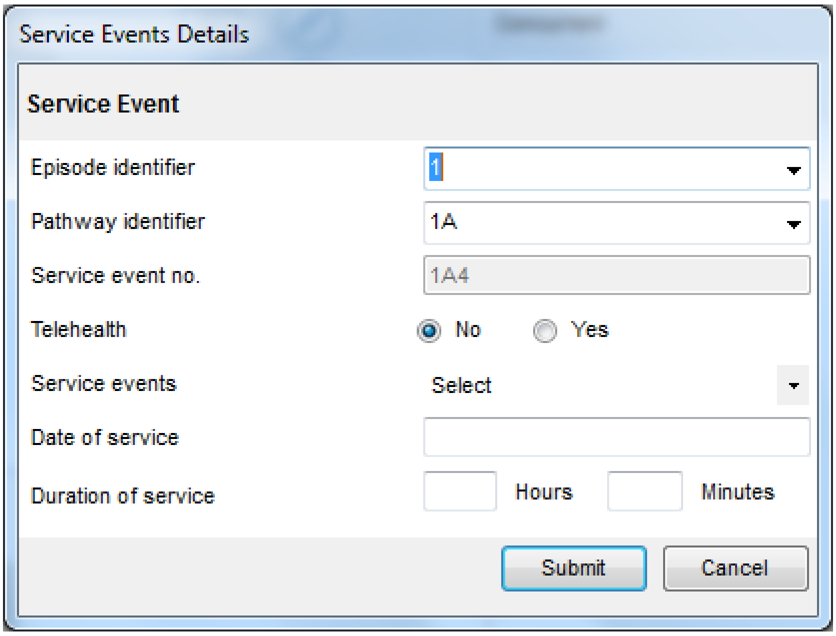
4.6 Service events



The service event panel is located on the right of the medical details panel and allows the user to add a new service event to any episode or pathway, filter, edit or delete a service event.

4.6.1 Creating a service event

Clicking on the button *Add an event* on the top right hand corner of the service event panel will open the service event detail form. The user is then able to fill the details before submitting. Clicking on Cancel closes the form without saving the new service event data.



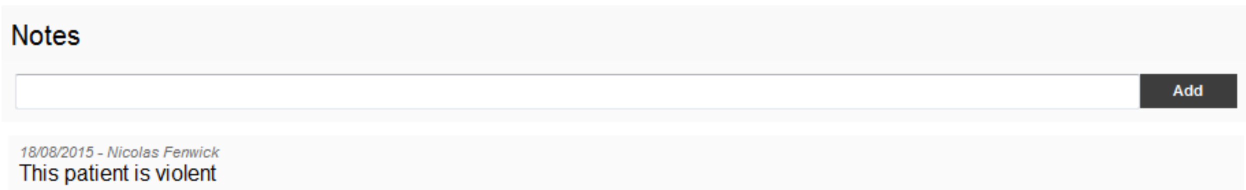
4.6.2 Edit service event details

Clicking on the pencil icon opens the service event details form populated with the details of the event selected. Clicking on Submit will update the service event after validation. The Cancel button will close the form without saving the new data.

4.6.3 Deleting a service event

Clicking on the trashcan icon will delete the service event selected.

4.7 Patient Notes



Notes for patients will enable you to store any text you would like to record against the patient. You will need to type the text and click on add. The text will then be displayed underneath.

5 Questionnaire Pages

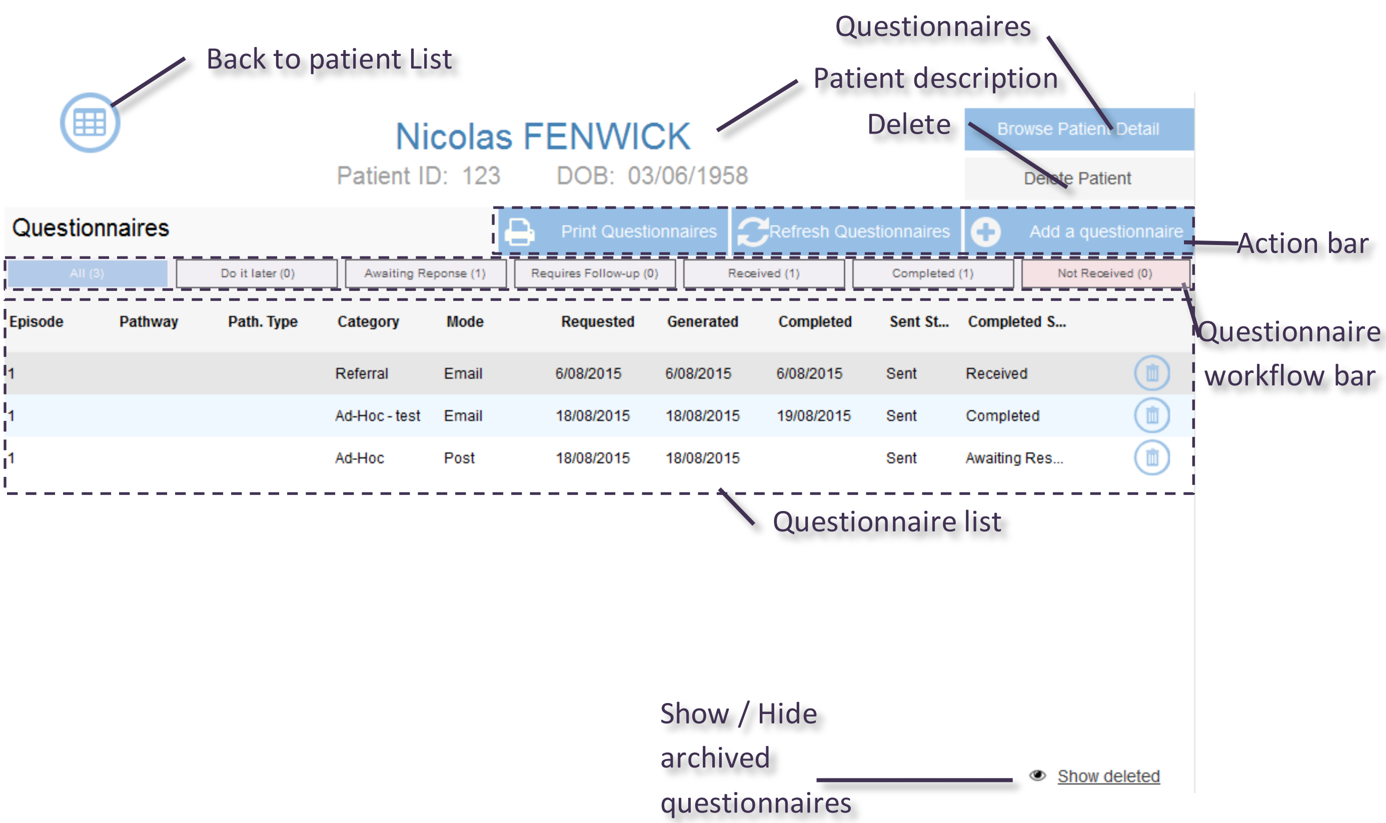
In epiCentre there are two pages for managing questionnaires. The first, 'Patient Questionnaires' is used for viewing a list of questionnaires for a specific patient. It is accessible from the Patient list or by clicking 'Browse Questionnaires' when viewing a specific patient's 'Patient medical detail' page. The second, 'Questionnaires', is used for viewing all questionnaires for the facility. These pages are very similar; however there are slight differences in available functions which will be explained in the following sections.

5.1 Patient questionnaires

5.1.1 Concepts

The 'Patient Questionnaires' page displays a list of questionnaires which belong to the patient selected. Most of the features of this page are similar to the Questionnaires page description. Nonetheless, some actions such as the ability to create Ad-hoc questionnaires or the process used to refresh questionnaires are specific to this page.

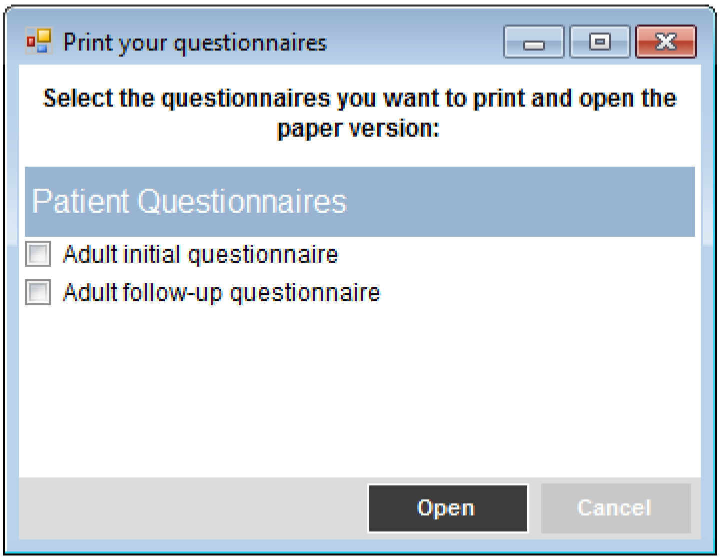
5.1.2 Patient questionnaires page



5.1.3 Action bar

Print questionnaires

Clicking on *Print Questionnaires* opens a list of questionnaire which pdf file can be obtained. For adult pain clinics, you can select initial or follow-up questionnaire which can then be printed by the user.



Refresh Questionnaire

The refresh questionnaire button allows automatic synchronisation of the questionnaires list stored in epiCentre, the standard process and the REDCap server. Actually, 4 actions are processed when clicking on the *Refresh questionnaire* button:

- **Synchronisation of sent questionnaires with REDCap -** Clicking on 'Refresh Questionnaires' actually pulls data from the REDCap database and allows epiCentre to receive data from the patient.
- **Expiration of questionnaires -** Questionnaires are only active for a period of time. This period of time can be defined by each clinic. The default setting is 4 weeks. You will also be reminded that a questionnaire has been issued and is awaiting response after a customisable period of time. The default period of time is 2 weeks.
  Clicking on 'Refresh questionnaires' will cause questionnaires to expire if a response has not been received after the expiration deadline.
- **Pathway review questionnaires creation -** If a pathway is more than 6 months old a pathway review questionnaire will automatically be generated and added to the list of required questionnaires. The clinician will then be free to send them, cancel them or approve them to be sent.

- **Episode follow-up questionnaires creation -** The protocol stipulates that a follow-up questionnaire should be created three months after an episode is finished. Clicking 'Refresh questionnaires' will generate these questionnaires for episode that ended 3 months ago and place them in the queue of required questionnaires.

Add a questionnaire

A user may want to send an ad-hoc questionnaire to a patient. Clicking on 'Add a questionnaire' will open the questionnaire generation form (described in 5.1.7) and enable the user to send an ad-hoc questionnaire.

5.1.4 Questionnaire workflow bar

In order to filter the questionnaires based on the current state in the workflow, the questionnaire workflow bar offers 7 buttons that represent a status. The number between parentheses shows how many questionnaires there are in each category. For a more detailed explanation of the workflow for managing questionnaires, please see the section 'Tracking and following up Questionnaires'.

- **All -** By default the user will see all questionnaires.
- **Do it later -** Filters the questionnaire list so that it only displays questionnaires that are pending to be sent.
- **Awaiting Response -** Filters the questionnaire list so that it only displays questionnaires that have been sent and are still active.
- **Requires Follow-up -** Filters the questionnaire list so that it only displays questionnaires that have been active longer than the pre-defined follow-up period. These questionnaires could be sent again in order to increase response rates.
- **Received -** Filters the questionnaire list so that it only displays questionnaires for which an answer has been received. Received questionnaires require input from a clinician to be set as completed.
- **Completed -** Filters the questionnaire list so that in only displays questionnaires for which an answer has been received and a clinician has completed the questionnaire.
- **Not Received –** These questionnaires are now inactive as the patient has not answered before the predefined questionnaire deadline. Answers will still be received when clicking on Refresh Questionnaire but only on that page, not on the group questionnaire page (see 5.2).

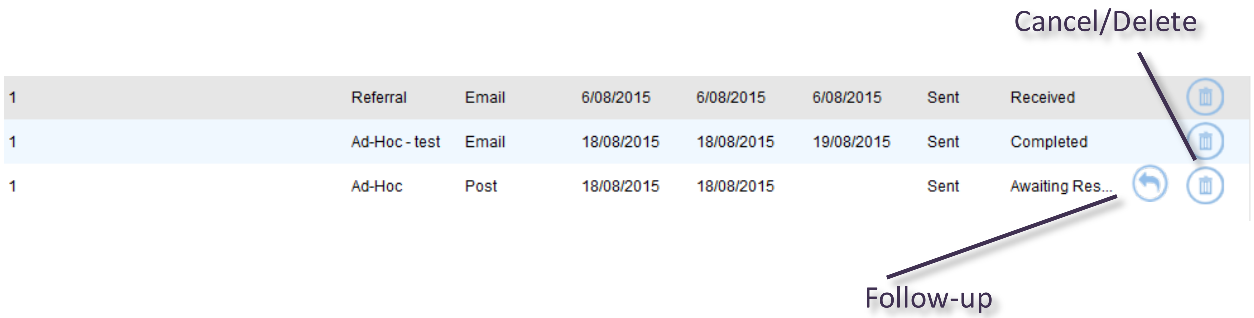
5.1.5 Questionnaire list header

The questionnaire list header helps the user to do advanced ordering based on:

- episode identifier
- pathway identifier, if applicable
- pathway type, if applicable

- questionnaire category
- questionnaire mode
- requested date (date of the first request for this questionnaire)
- generated date (date of the generation of the questionnaire on REDCap)
- completion date (date of the response from the patient)
- sent status - the sent status will only be enabled if the workflow bar is set to the default state
- completed status - the completed status will only be enabled if the workflow bar is set to the default state

5.1.6 Questionnaire list

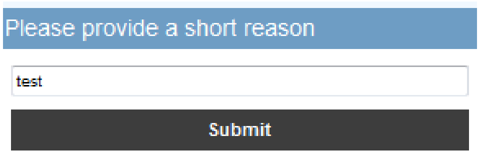


The questionnaire list displays a list of questionnaires on the left and a list of actions on the right allowing the user to cancel/delete a questionnaire or follow-up a questionnaire.

Double clicking on the questionnaire line will open:

- The questionnaire manager page if the questionnaire has been sent
- The questionnaire creation page if the questionnaire has not been sent yet.

Ad-Hoc questionnaires are questionnaires that are requested on-demand. They are not included in the ePPOC reports. Although in order for them to make sense for the carer team, it is now possible to define a short description. Hovering the mouse over the “Ad-Hoc” category will display an editable text box. Clicking on the Ad-Hoc category will pin the box on to the page and let you edit the short reason before clicking on “Submit”.



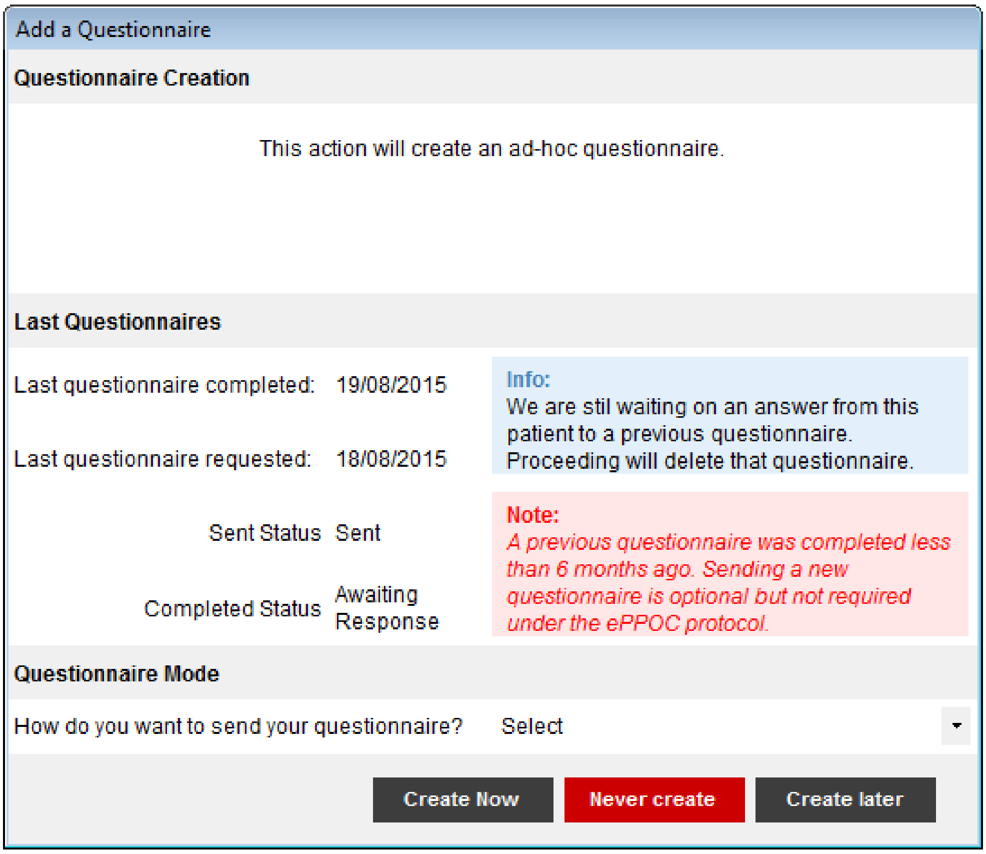
Create a questionnaire

Double clicking on a questionnaire that appears as “Do it later” will open the questionnaire creation page. Users will have to select the Questionnaire Mode (Email, Post, In Clinic, Phone) and click on ‘Create Now’ Questionnaire

The ‘Last Questionnaire’ panel will help the user decide if the questionnaire should be created now, later or never. The Last Questionnaire panel will provide information on the previous questionnaires sent or completed and give advice based on the standard protocol.

The user will then be able to create now, Schedule for later or decide never to send the questionnaire.

The user will also have to select, for information only, a mode of delivery of the questionnaire.



Deleting a questionnaire

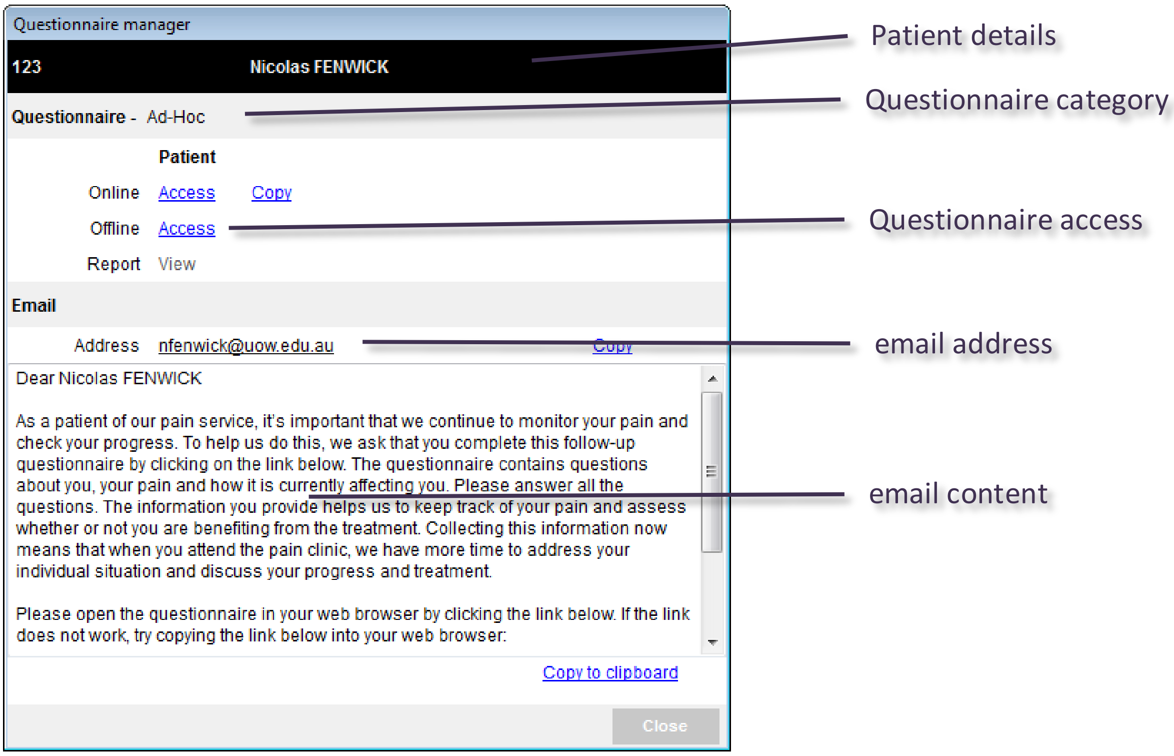
Clicking on the trashcan icon will delete a questionnaire. Deleted questionnaires can be restored and appear in light pink.

Follow-up questionnaires 

epiCentre will remind you that a questionnaire has been awaiting response for a certain period of time and that the patient may need to be followed-up in order to increase response rate. Clicking on the arrow icon will let you mark the questionnaire as followed-up.

View the questionnaire Manager

Double clicking on a created questionnaire will open the questionnaire manager. The questionnaire manager will allow you to easily complete the questionnaire or generate an email to be sent to your patient.



- **Patient Details**: The questionnaire manager will let you know the name and patient identifier of the patient whom the questionnaire has been created for.
- **Questionnaire Category**: The questionnaire category will let you know which kind of questionnaire has been created:
  - Episode Referral
  - Pathway Start
  - Group Program Start (in a concurrent pathway)
  - Pathway Review
  - Group Program end (in a concurrent pathway)

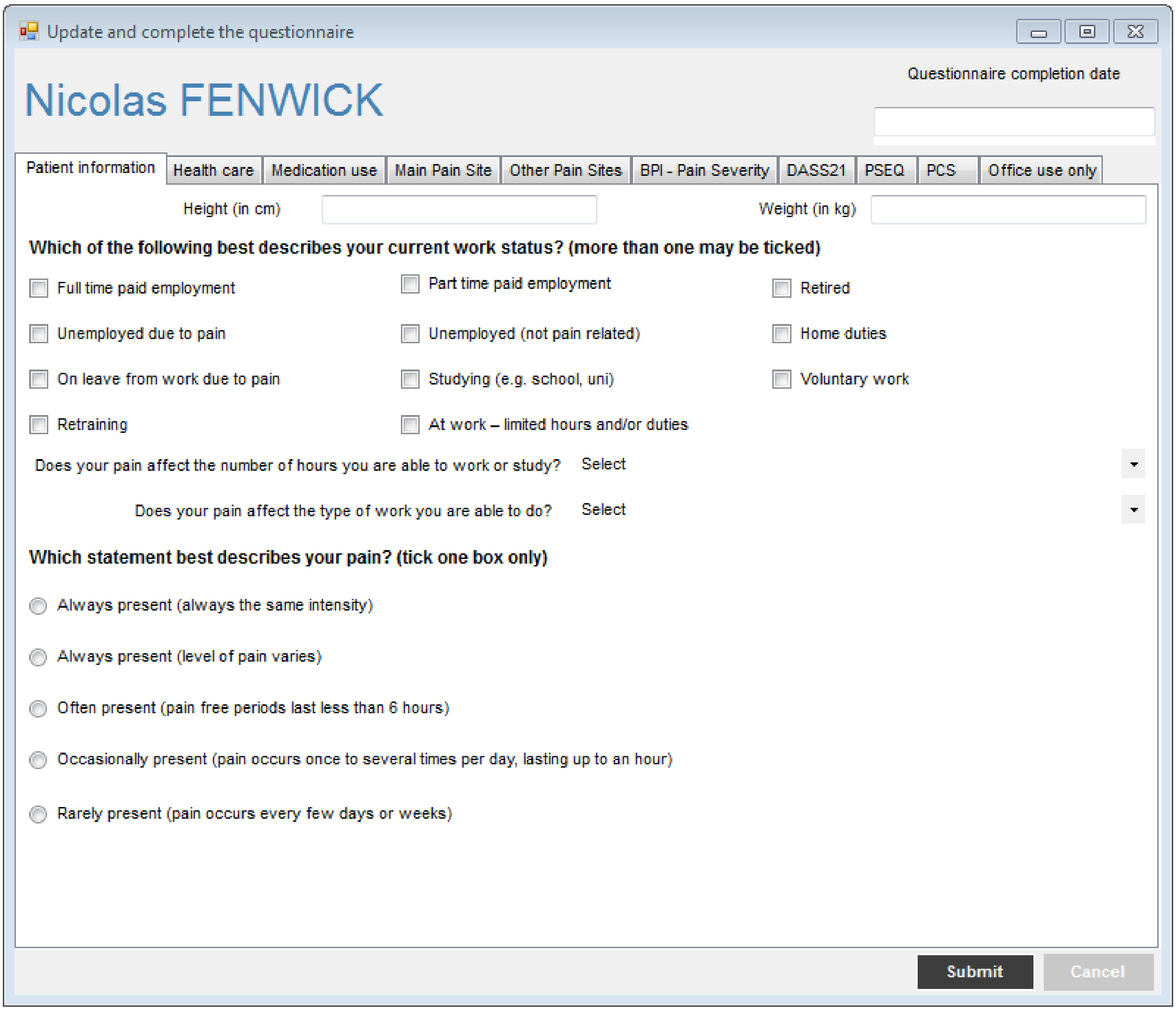
  - Pathway End
  - Episode Follow-up
  - Ad-Hoc Questionnaire
- **Questionnaire access** will let you access 3 different interfaces to review or complete the questionnaire.
  - Online questionnaire is the questionnaire that can be opened in your web browser. In fact clicking on “Access” will open the online questionnaire page on your web browser. Clicking on “Copy” will copy the internet address to your clipboard and let you paste it in a document or an email using Ctrl+V.
  - Offline questionnaires are the name for the questionnaires inside epiCentre. You do not need to have access to the internet to access these questionnaires. Clicking on “Access” will open the interface detailed in the “Offline questionnaire interface” paragraph of this documentation.
  - Reports are generated based on the answer to the questionnaires as well as all the answers to previous questionnaires. You will be able to access the report by clicking on “Access” in front of Report.
- **Email address** will show the email address of your patient if recorder. Double clicking on the email address will open outlook and prepopulate the recipient of the email as well as the content.
- **Email content**. The email content is editable but also customisable for all questionnaires. If you want to know more about how to customise this email, refer to the Facility Settings page.

Offline questionnaire interface

Questionnaire can be filled by a clinician in epiCentre in the “Update and complete the questionnaire” form. The form is split into:

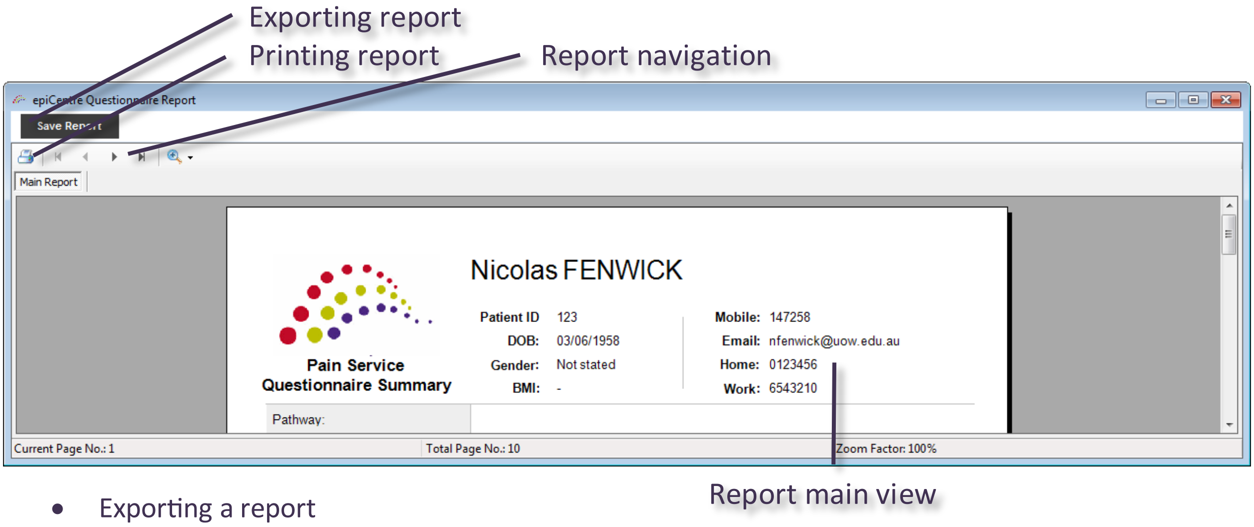
  - A header encompassing general information about the patient and the questionnaire such as the name of the patient and the completion date.
  - A body containing tabs. Each tab represents a section of the ePPOC questionnaire.
  - A footer for the actions. Here, the user can either cancel his changes or validate them.

Before being saved the fields will be validated and errors messages will be displayed for each erroneous field.


Update and complete the questionnaire
Nicolas FENWICK
Questionnaire completion date
Patient information
Health care
Medication use
Main Pain Site
Other Pain Sites
BPI - Pain Severity
DASS21
PSEQ
PCS
Office use only
Height (in cm)
Weight (in kg)
Which of the following best describes your current work status? (more than one may be ticked)
Full time paid employment
Part time paid employment
Retired
Unemployed due to pain
Unemployed (not pain related)
Home duties
On leave from work due to pain
Studying (e.g. school, uni)
Voluntary work
Retraining
At work – limited hours and/or duties
Does your pain affect the number of hours you are able to work or study?
Select
Does your pain affect the type of work you are able to do?
Select
Which statement best describes your pain? (tick one box only)
Always present (always the same intensity)
Always present (level of pain varies)
Often present (pain free periods last less than 6 hours)
Occasionally present (pain occurs once to several times per day, lasting up to an hour)
Rarely present (pain occurs every few days or weeks)
Submit
Cancel

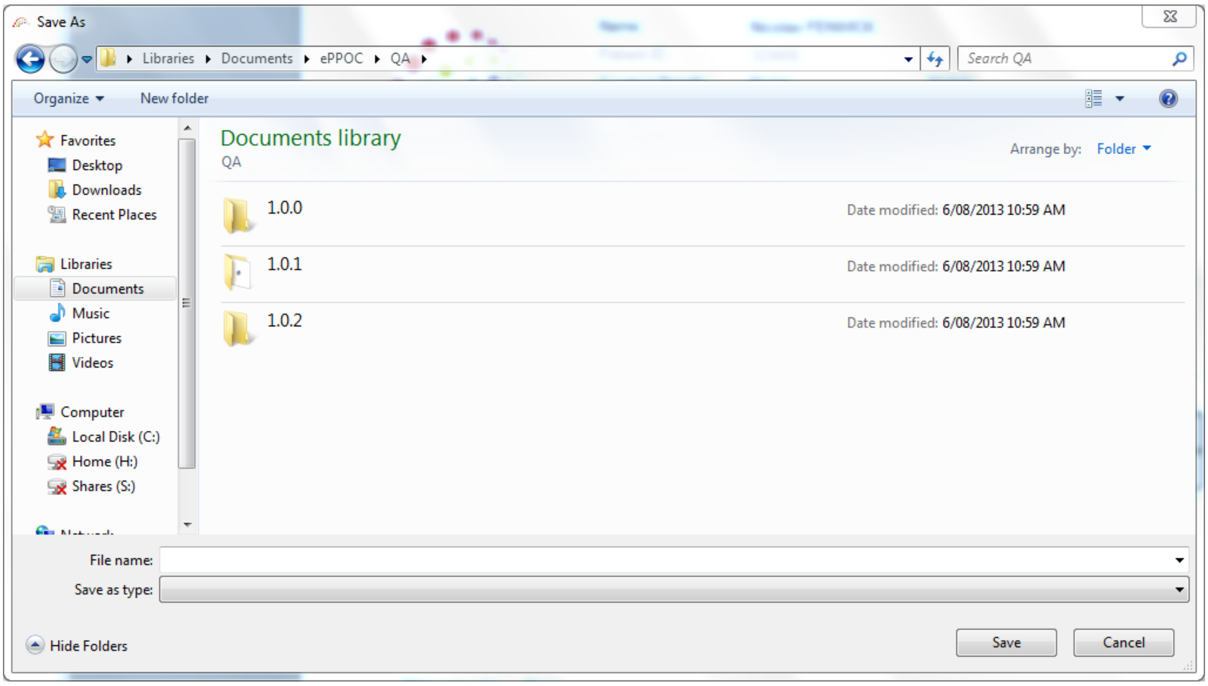
Reports

Once a questionnaire has been answered to by the patient and the answer received by epiCentre, the user will be able to read, save or print the report of the questionnaire encompassing all the individual answers as well as some metadata such as the scores automatically computed.



- Exporting a report

A report can be exported to pdf by clicking on the Save Report button on the top of the screen. This action will open a folder explorer.



In order to save the file as a pdf, the user needs to select the folder he wants the file to be saved to. The user will then to enter the file name followed by .pdf**.** Clicking on 'Save' will export the report to the selected folder.

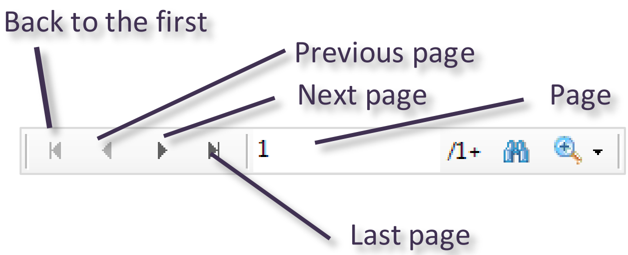
Clicking on *Export record* on left of the top bar will result in the same action.

- Printing a report

Clicking on the printer icon in the top bar will open a dialog box that will enable the user to print one or multiple pages of the questionnaire summary.

- Navigation

Crystal report provides arrows to navigate between pages on the questionnaire summary.

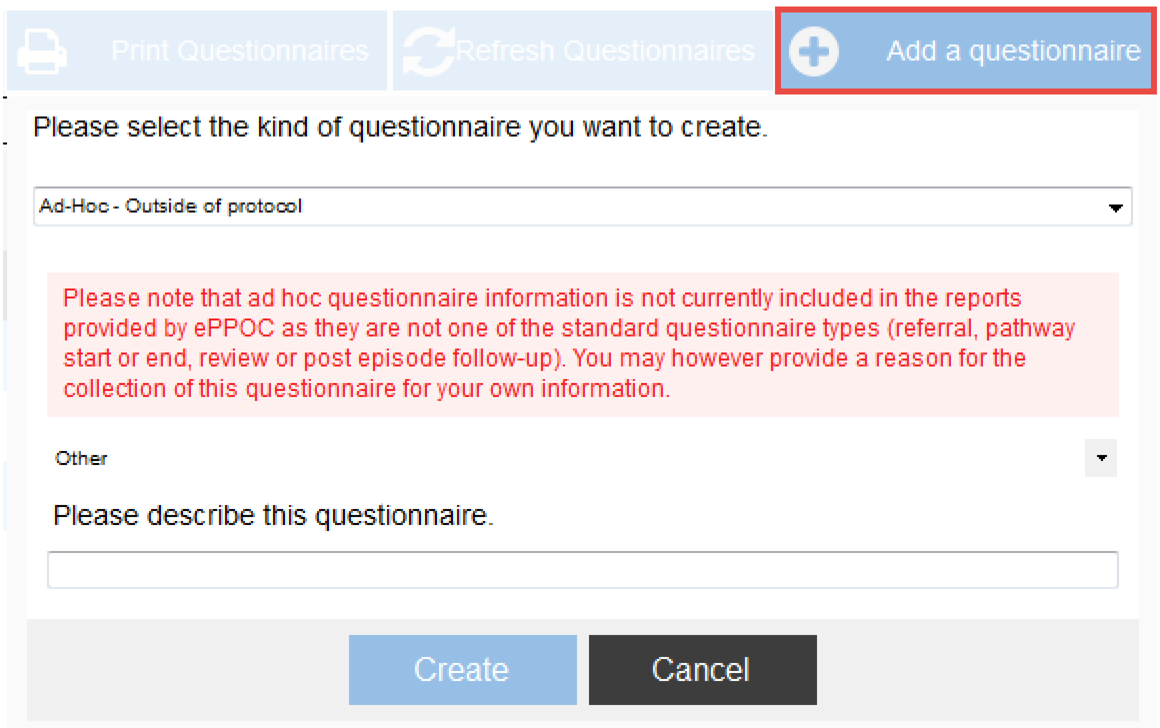


5.1.7 Features specific to the 'Patient Questionnaire' page

Some features are only available on the Patient Questionnaire page. They are described below.

Ad-hoc questionnaire creation

Because a questionnaire is related to a patient, this is the only page that will allow a user to create an ad-hoc questionnaire since it must be linked to a particular patient.



A click on ‘Add a questionnaire’ will let you pick the category of questionnaire you would like to create based on their availability. For instance you will not be able to create 2 episode referral questionnaire but if no episode referral has been created you will have the opportunity to create a new one.

If the questionnaire you would like to create is not a questionnaire described by the ePPOC protocol, you will be able to specify in more details the kind of questionnaire you want to create. You will be able to choose among these categories:

- Episode Follow-up 1 month
- Episode Follow-up 3 month
- Episode Follow-up 6 month
- Episode Follow-up 12 month
- Other – Selecting Other will let you specify some free text.

Clicking on “Create” will open the “Add a questionnaire page” helping you create a questionnaire on-demand.

Refresh questionnaire specificity

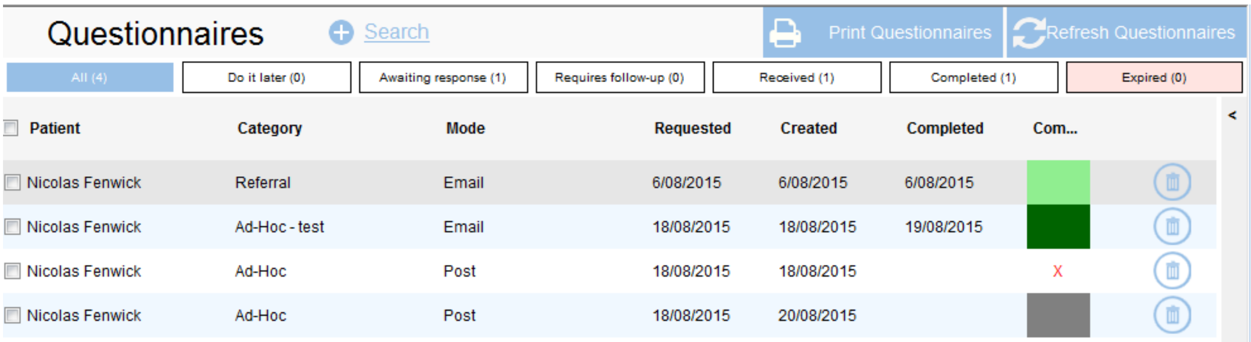
Pulling questionnaires from this page will not only allow pulling active questionnaires from the REDCap server but also expired and questionnaires for which no answer have been received yet. Using this functionality is a good way to keep questionnaires alive even after their expiration date and allows the user to be able to ensure that data from the patient is never lost even if they answer after the deadline.

5.2 Questionnaires

5.2.1 Concepts

Like the Patient Questionnaire page, the Questionnaires page shows a list of questionnaires and allows a list of questionnaire related actions. The difference is that the questionnaire page displays all questionnaires for all patients stored in epiCentre.

5.2.2 Questionnaire page



From the Questionnaires page, users are able to print paper versions of both the initial and follow-up questionnaires. Clicking on *Refresh Questionnaires* will enable the user to synchronise the questionnaire list with REDCap as well as updating the status of the questionnaires if necessary.

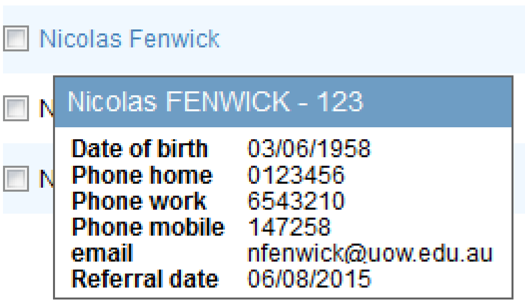
This is the page which should usually be used for following up questionnaires as described in the section 'Tracking and following up Questionnaires' as it shows questionnaires for all patients in the system.

5.2.3 Features specific to the 'Questionnaires' page

Patient Details

Hovering the first column of the table will provide information about the patient including:

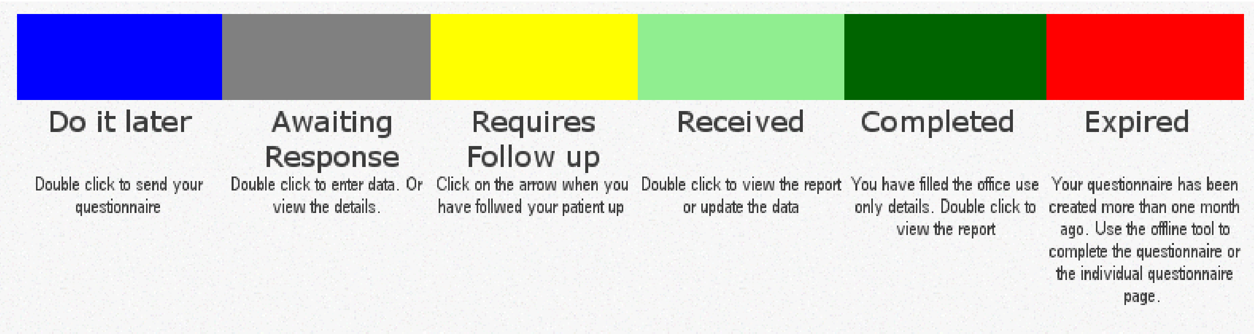
- Patient Name
- Patient Identifier
- Patient phone numbers (home, mobile and work)
- Email
- Referral date



In order to facilitate access to the patient information, the user is able to click on that same column to open the patient questionnaire page for the patient to whom the questionnaire is assigned.

Colour code

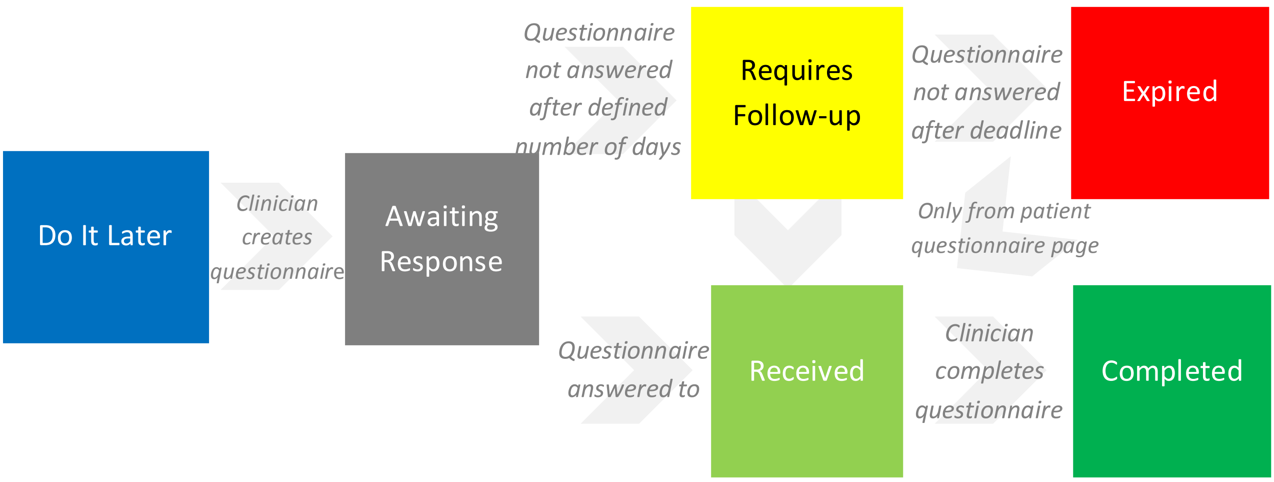
In order to save space, questionnaire statuses are colour coded according to the following scale:



5.3 Tracking and Following-up Questionnaires

Technical limitations have forced us to introduce a deadline for all questionnaires to be returned by. In order to improve the response rate, we have also introduced a reminder for questionnaires that have been awaiting for a response for too long. We called this status "Requires Follow-up".

Services have different policies when it comes to deadline. For that reason we allow each service to define the number of day they allow before a questionnaire is considered as expired and the number of day after which they would like to be reminded to follow-up a patient (see 6.3.1).



6 Managing Users and Facilities

6.1 Application Level Security

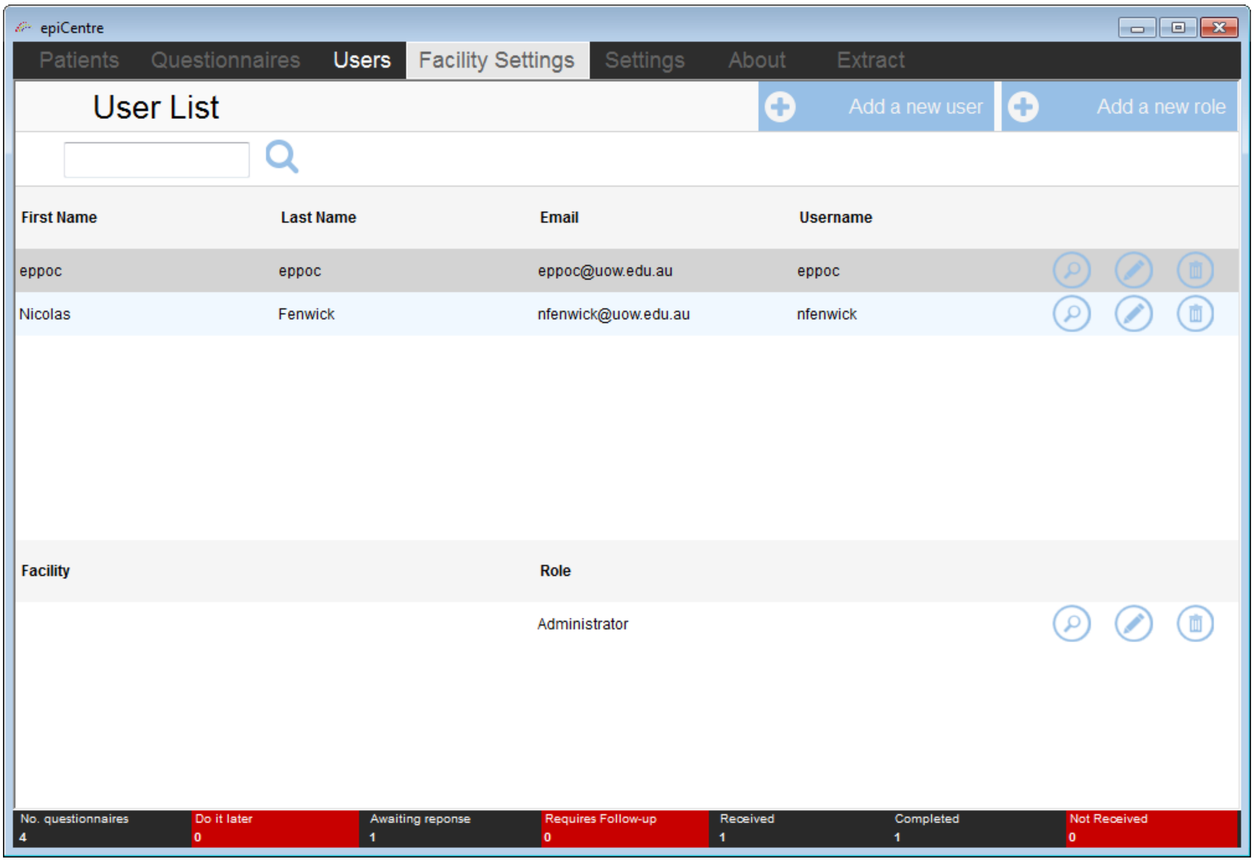
epiCentre has a simple application security model. Every user who accesses the system must have a username and password. They must also be granted a ‘User Role’. A ‘User Role’ may belong to a specific Facility, or ‘All Facilities’. There are 4 possible role types for a User Role. They are listed below, allowing with the capabilities and features:

- **Administrator:**
  - Create and Delete ‘Facilities’ in the system
  - Create and Delete Users and User Roles for all Facilities and at all Role Levels (i.e. an Administrator can create other users with Administrator role
  - Connects to the database with the role ‘dbo’ and so will have the ability to run database update wizards when updates to epiCentre are released that require changes to database structure or content.
  - ‘Administrator’ role can only apply to ‘All Facilities’
- **Manager:**
  - Modify the RedCap tokens for the Facility of which they are a ‘Manager’
  - Create and Delete Users and User Roles for the Facility of which they are a ‘Manager’ at the levels of ‘Manager’, ‘User’ and ‘Reader’
- **User:**
  - Can add, edit and delete Patients, Episodes, Pathways, Service Events and Questionnaires for a Facility in which they have the role ‘User’
  - Can run reports
- **Reader:**
  - Can read but NOT create, edit or delete Patient, Episode, Pathway, Service Events and Questionnaires for a Facility in which they have the role ‘Reader’

The role types Manager, User and Reader must apply to a specific Facility. A user may have only one role for each Facility in the system. When the user logs in, they are asked to select a Facility. The system will ensure they have a User Role for that Facility and their permissions will be applied according to the role type they have for that facility.

6.2 Creating Users and Roles

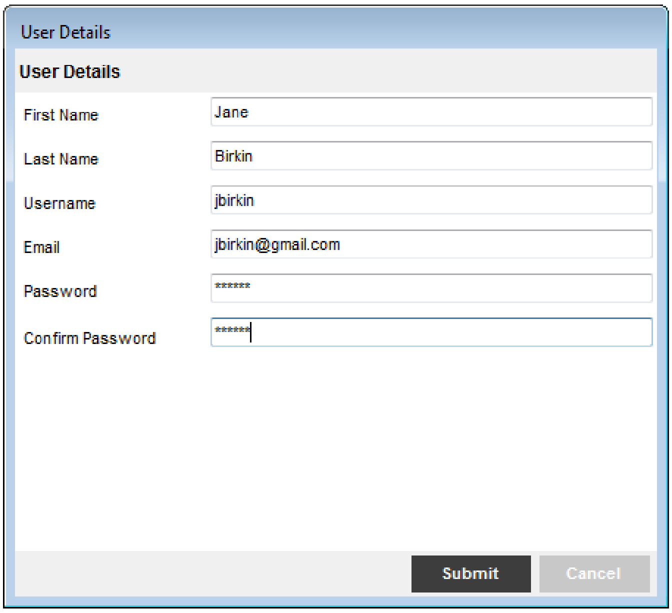
A user which has an Administrator or Manager role is able to create, edit and delete users and user roles. This works in a similar way to creating a Patient, except it is a little simpler.



6.2.1 Creating a new user

To create a User, the administrator or manager will have to click on the button 'Add a new User' opening the user manager page. On the user manager page, you will have to define:

- First name
- Last name
- Username
- Email
- Password



Click on Submit to validate your changes.

6.2.2 Updating an existing user

A user can be updated by clicking on the pencil icon in front of his or her name.

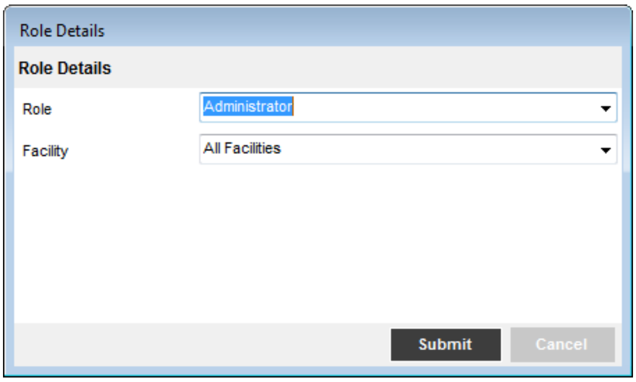
6.2.3 Deleting a user

A user can be deleted if they do not have any role by clicking on the trashcan icon in front of their name.

A user cannot do anything until they are assigned a role.

6.2.4 Adding a new role

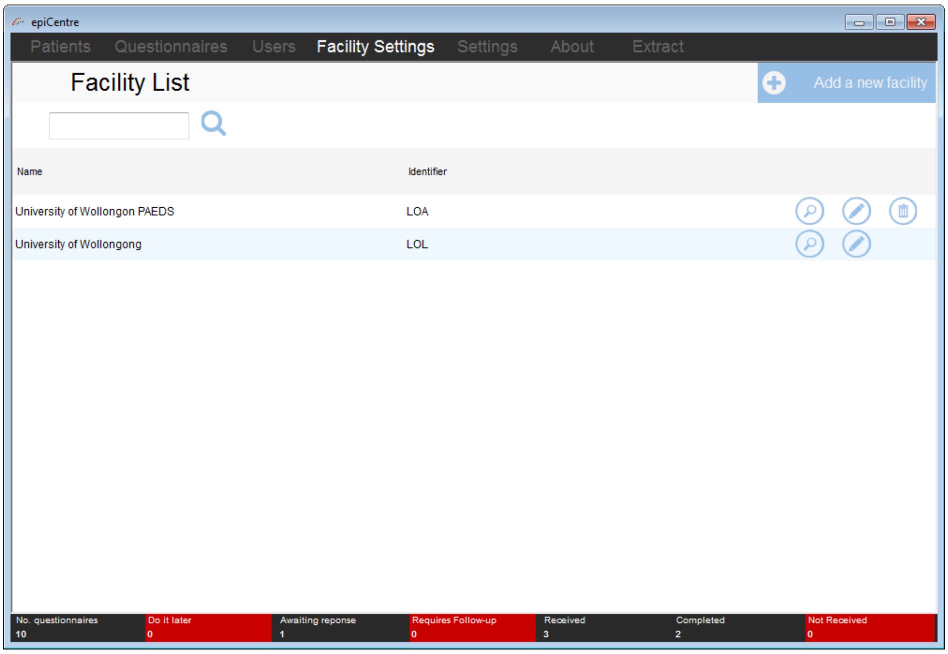
Select the user first in the list. Then click on “Add a new role” and select the role you want the selected user to be assigned.



Once you have created a role for a user in a facility, they will be able to log in to epiCentre for that facility and work with the data for that facility as appropriate to their role.

6.3 Managing Facilities

Managers and Administrator users will also be able to see the Facilities screen. Most installations of epiCentre will only have one facility, which is configured as part of the ‘create database wizard’ (described in the following section).



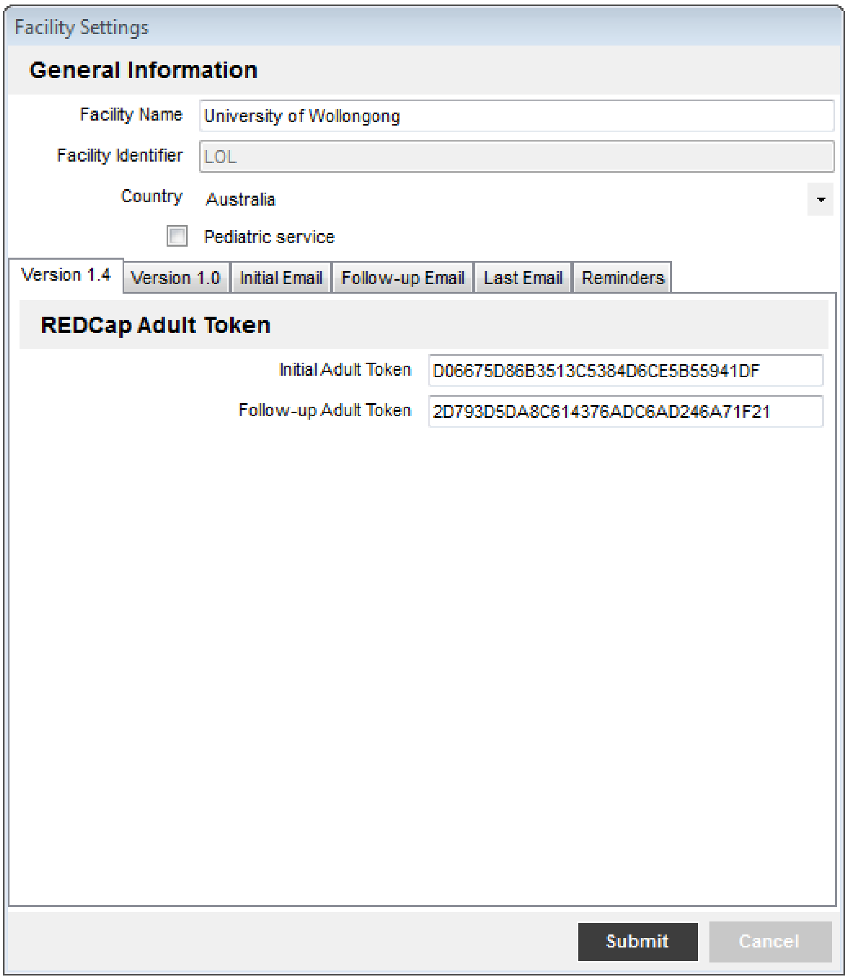
The Facility screen looks much like the Patient screen, with a list of facilities that currently exist. Only an Administrator can create a new Facility, by clicking the ‘Create Facility’ button and

entering the facility details. To create a facility that is able to communicate with REDCap, you will need a set of REDCap tokens provided by the ePPOC team at AHSRI. If you enter any tokens on the Facility Edit screen epiCentre will attempt to validate them with REDCap, and report errors if the tokens do not successfully validate.

6.3.1 Editing Facility Settings

Clicking on the pencil in front of the facility you are responsible for will open the “Facility Settings” page. The Facility Setting page will let you specify:

- Your facility name
- The country in which your hospital is based
- Whether your service is specifically a paediatric service
- Tokens for communication with REDCap
- Email text
- Reminders created by epiCentre.



In general you will not have to update the facility name, the country, the paediatric service or the token fields after epiCente is initially set up.

Updating emails

epiCentre creates 3 different emails that can then be sent using the questionnaire manager (see 5.1.6).

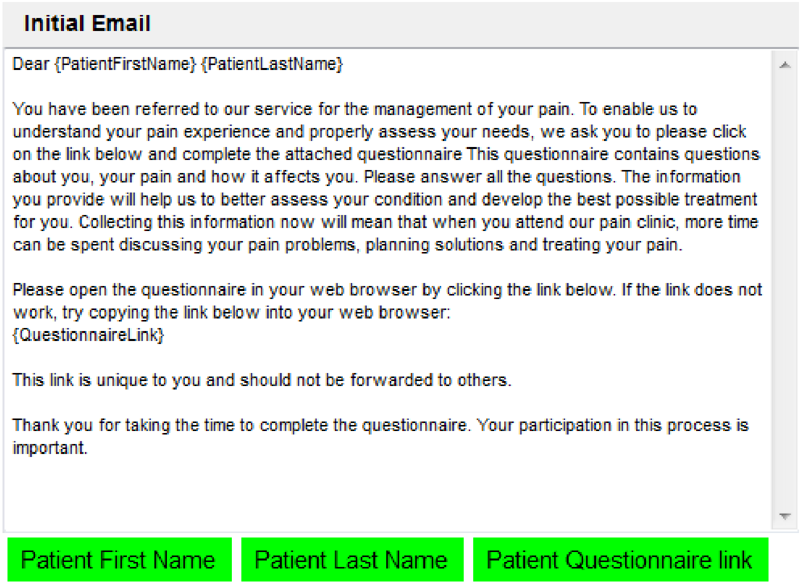
The initial email is the email generated when a referral questionnaire is sent. It is meant to introduce the questionnaire and explaining the reason a questionnaire is issued.

The last questionnaire email is meant to be sent when the last questionnaire is sent to the patient.

All other questionnaires are sent with the ‘follow-up email’.

These questionnaires are all customisable and you can do so using the same method.

Clicking on the name of the email you would like to customise in the tab of the “Facility Settings” page will let you edit the current template for this email. You can type your text and add 3 different dynamic fields:



- Patient First Name
- Patient Last Name
- Patient Questionnaire Link

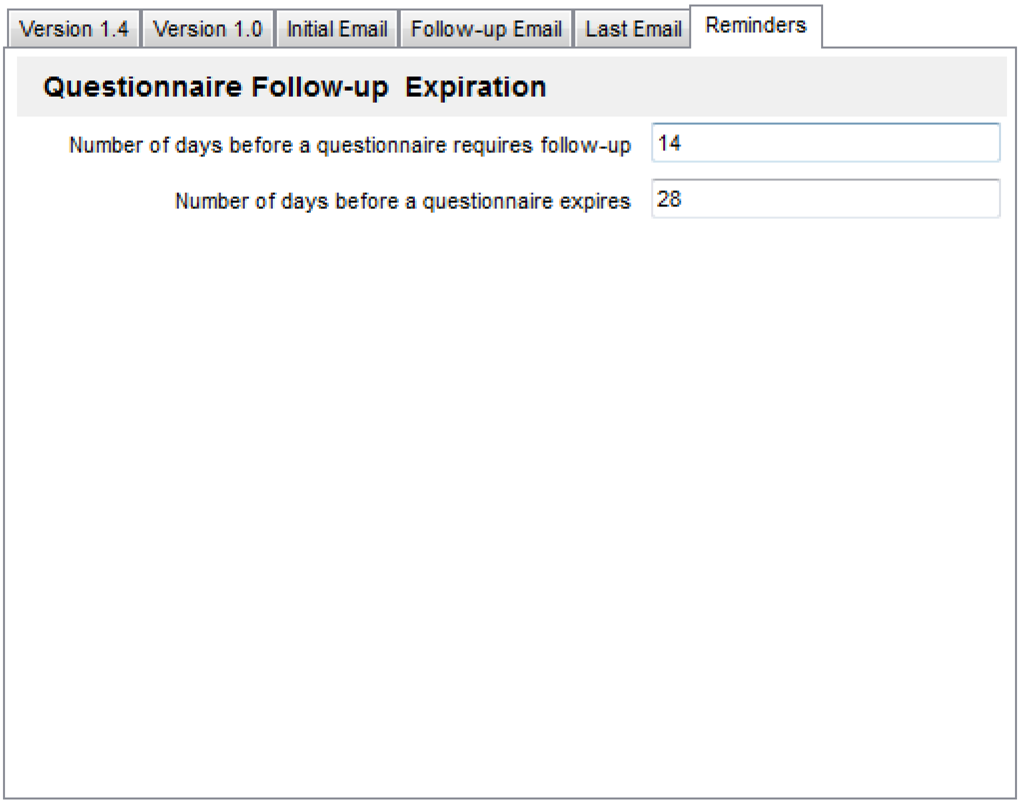
You can do so either by clicking on the right button under the text box or adding the appropriate label:

- {PatientFirstName} will be automatically changed to your patient’s first name.
- {PatientLastName} will be automatically changed to your patient’s last name.
- {QuestionnaireLink} will be automatically changed to display the link to the online questionnaire.

Updating reminders

Reminders are a great way to keep track of where each patient is up to in terms of questionnaire completion. So far there are only 2 different reminders explained in “5.3 Tracking and following up questionnaires”. The number of days for each of these reminders is customisable.

To do so, the user will click on “Reminders” in the tab of the “Facility Settings” page:



Textboxes will let the user define:

- The number of days between when the questionnaire is sent and when the patient needs to be followed-up.
- The number of days between when the questionnaire is sent and when the questionnaire expires.

Please keep in mind that the number of days before a questionnaire requires follow-up must be smaller than the number of days before it expires and a questionnaire cannot be active for more than 90days.

7 Extracting your data

The Data Extraction wizard will assist the user in the export of the outcomes stored in database. The extract files consist in 5 standard and 2 optional Coma Separated Files (CSV):

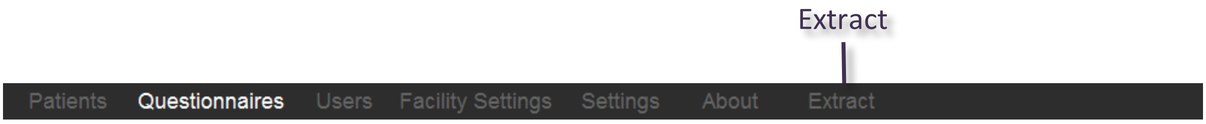
- A patient file will list all patients that have not been deleted and are in scope.
- An episode file will list all episodes which patient they belong to have not been deleted and are in scope.
- A pathway file will list all pathways which patient they belong to have not been deleted and are in scope.
- A service event file lists all service events which patient they belong to have not been deleted and are in scope.

- A questionnaire file lists all questionnaires which belong to a patient that have not been deleted and are in scope.
- A medication file lists all the medication attached to the questionnaires extracted. The medication file is optional.
- A patient note file that lists all the notes written by clinicians and attached to the extracted patients. The patient note file is optional.

An element is extracted if it belongs to or possesses an episode that has at least one Service event or questionnaire requested during the scope range.

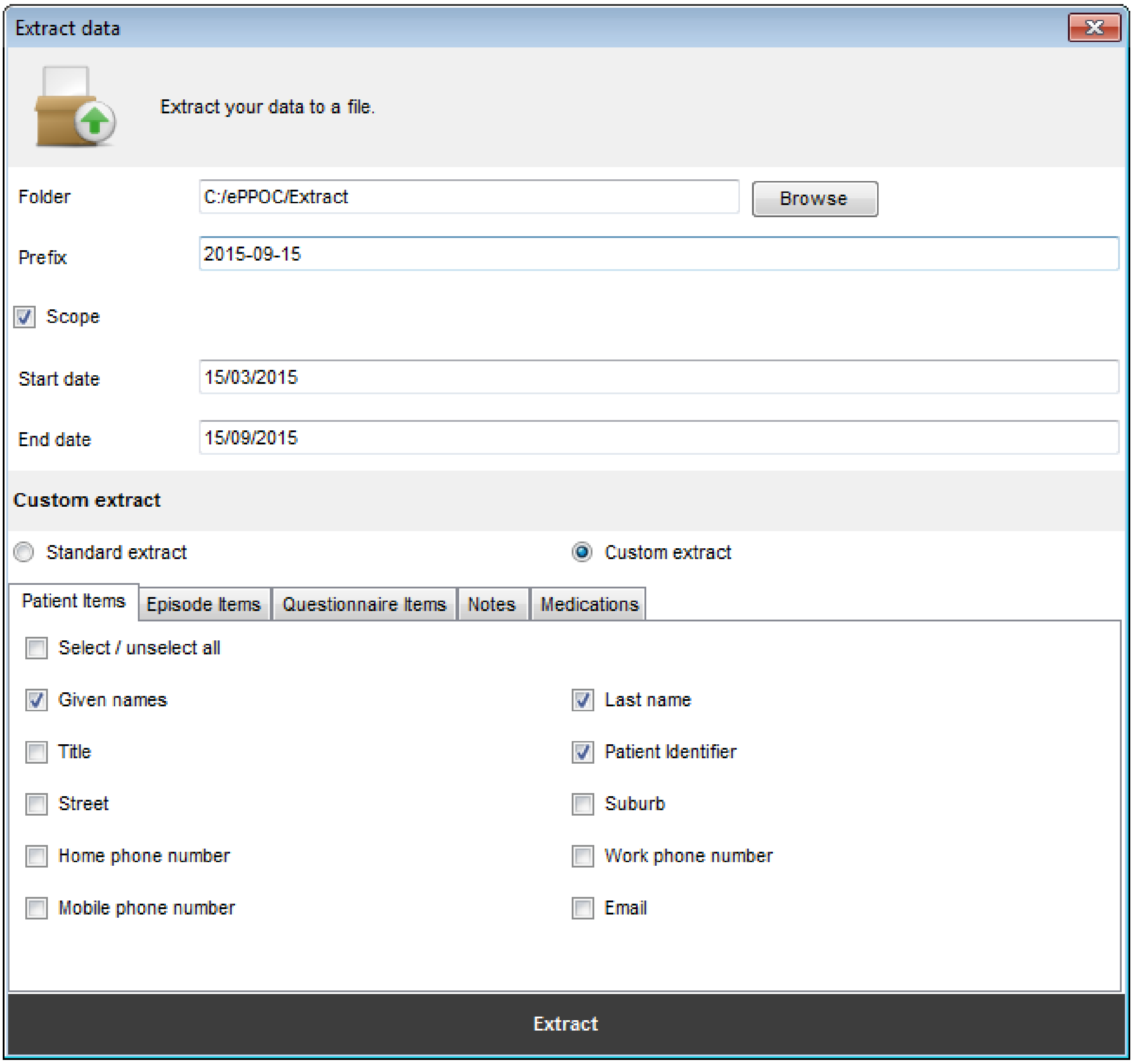
A header on top of each file will help the user match each column with the data item in the dataset.

A new “Extract” button has been added to the header at the top of the application, accessible from anywhere in the application, it will open the new Extract data wizard.



This wizard displayed underneath will require the user to fill the following fields:

- **The Folder:** These files need to be stored on a hard drive. The wizard will help you specify the location you want these files to be stored in by letting you enter the path or selecting it clicking on “Browse”.
- **The Prefix:** Most users plan on having multiple set of data. Defining a prefix will help you differentiate them by adding a particular prefix to each set. The template for the name will be the following: *prefix_dataitem.csv*. Where the prefix is the string of characters specified in this text box and “data item” is the name of the Level in the standard dataset (e.g. Patient, Episode, Pathway, Service Event or Questionnaire.)
- **The scope:** It is also possible to specify the scope of the extract. Having the Scope checkbox ticked will let you precise the date range for your extraction.
- **Standard/ custom extracts:** Standard extracts are the extracts sent to the ePPOC team they are meant to be de identified and as compact as possible. For your projects you may want to include identifiers or fields not included in the ePPOC dataset such as the medication list. In order to do so, you will have to select custom extract and select the specific items you would like to add to the standard extract.



8 Feedback

We are always working to make your experience as successful as possible with epiCentre. If you have any feedback or specific requirement for the next version, submit it by email at the following address:

eppoc@uow.edu.au